

241300-53-T (Vol. III)

Appendix for
P-3/UWB Flight
Portage, Maine
26-27 June 1995

Volume II

19990921 016



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27 Jun 1995
Tape: E1422

Post-line Data Sheet
Line 25
Mission: PORTAGE MAINE, DAY

Time: 178:00:09:47
Pass 14
Req.# 14

AIRCRAFT & CHANNEL DATA

Altitude		CH 1	CH 2	CH 3	CH 4
Desired:	10000 ft	p-VV	p-VH	p-HV	p-HH
Baro:	9979 ft s.d.=	2 Swath Ctr Ang:	30.0°	30.0°	30.0°
Slt. rng:	18680 ft	Tgt Dep Ang:	30.0°	30.0°	30.0°
Look:	Right	St rng (ft):	17141	17141	17141
Depr Ang:	25.0°	Near Rng Dep:	35.6°	35.6°	35.6°
Des. trk:	126.0°	Far Rng Dep:	17.5°	17.5°	17.5°
Start Sq:	90.0°	Atten (dB):	52.0	54.0	53.0
End Sq:	90.0°	RMS Video (%FS)	26.2	15.5	16.9
					63.0
					34.2

WAYPOINTS

	Latitude	Longitude
Line up:	N 46:56.83	W 68:48.36
Start:	N 46:49.80	W 68:34.19
End:	N 46:43.93	W 68:22.42
From:	N 54:27.42	W 91:52.73
To:	N 35:38.07	W 51:55.62

Main Target: GP
Mocomp Point:
Lat: N 46:44.73
Long: W 68:30.56
Tgt Trk: 0.0 Tgt Vel: 0.0
Alt: 660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1
Resolution: N/A
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6
TX Chirp Filename: CTL1U2B

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts) -
Ave Gndspd: Real -> 253.8 kts
Mocomp Off for Chnl 1, 2, 3, 4
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF
RX Chirp Filename: CRL1N0A

Ave Ref Vel -> -.6 fps (s.d.= 1.5)
Ave Fil Vel -> .8 fps (s.d.= 1.5)

NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation: 0.0°	Starting: 5537 ft	(2)
L: -70.0	Azimuth: 0.0°	Ending: 6766 ft	(2)
C: -70.0	Pitch: 0.0°		
P: 46.8			

Vel Bias	CAL Atten
X: 1035.0	X: 63.8 dB
Y: -433.0	L: 63.8 dB
Z: 6697.0	C: 63.8 dB

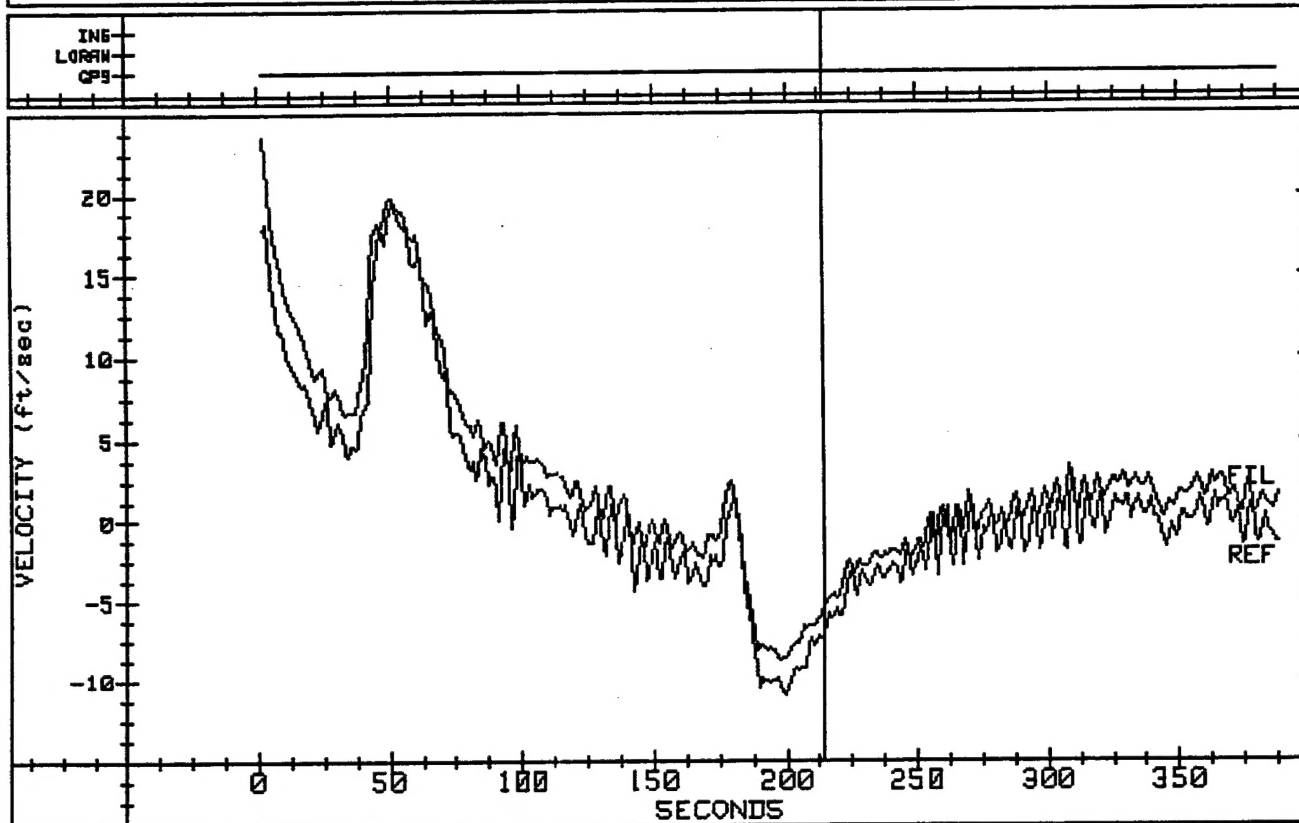
LINE Map Time (UCT)
Start: 00:09:47
End: 00:12:26

Mocomp Counters

Start: 844534 000CE2F6h
End: 871201 000D4B21h

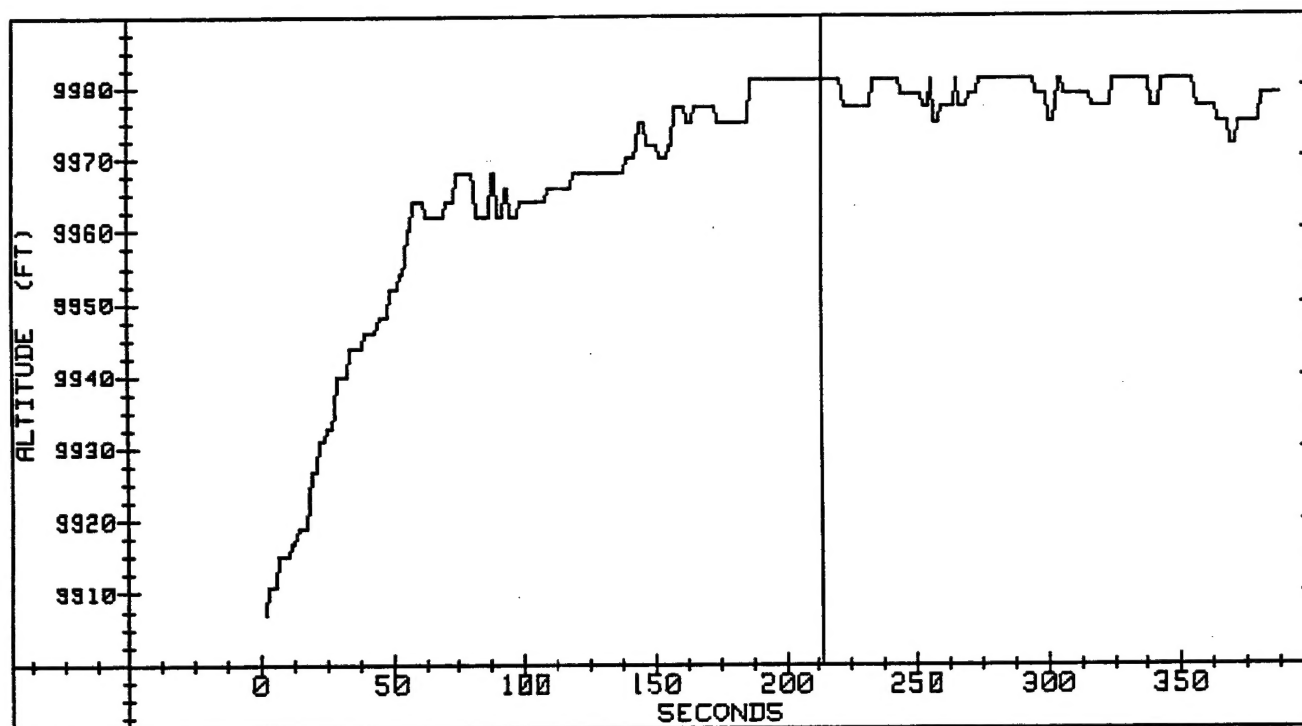
CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 178 TIME 0:6 PASS 14



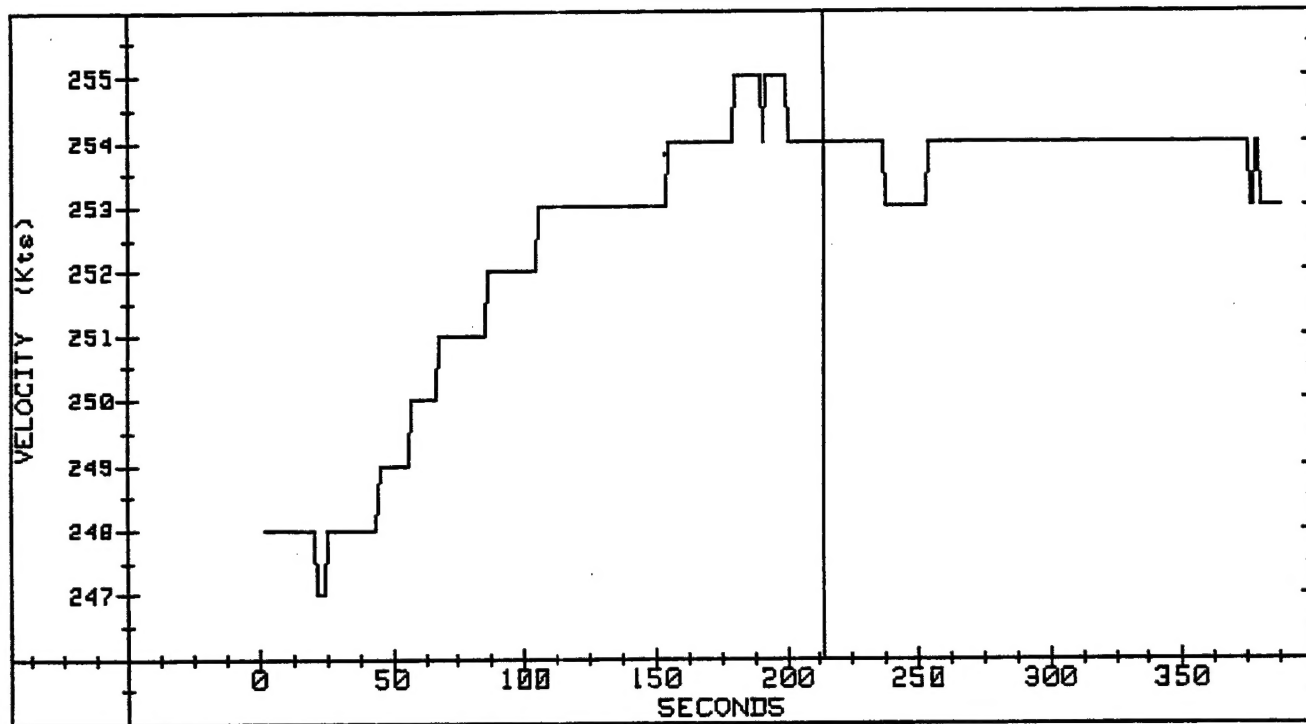
BARO ALTITUDE

DAY 17B TIME 0:6 PASS 14 m= 9979. sd= 2.30759



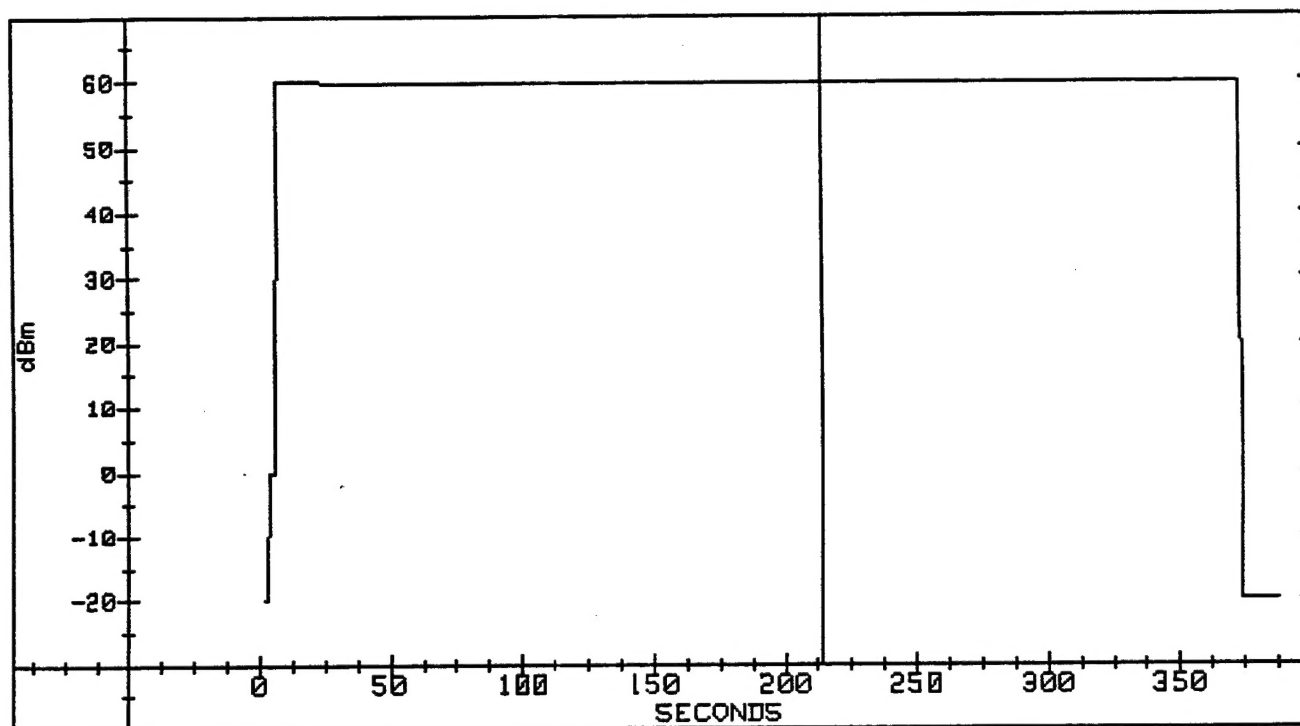
INS GROUND SPEED

DAY 170 TIME 0:6 PASS 14 m= 253.0, sd= .374531



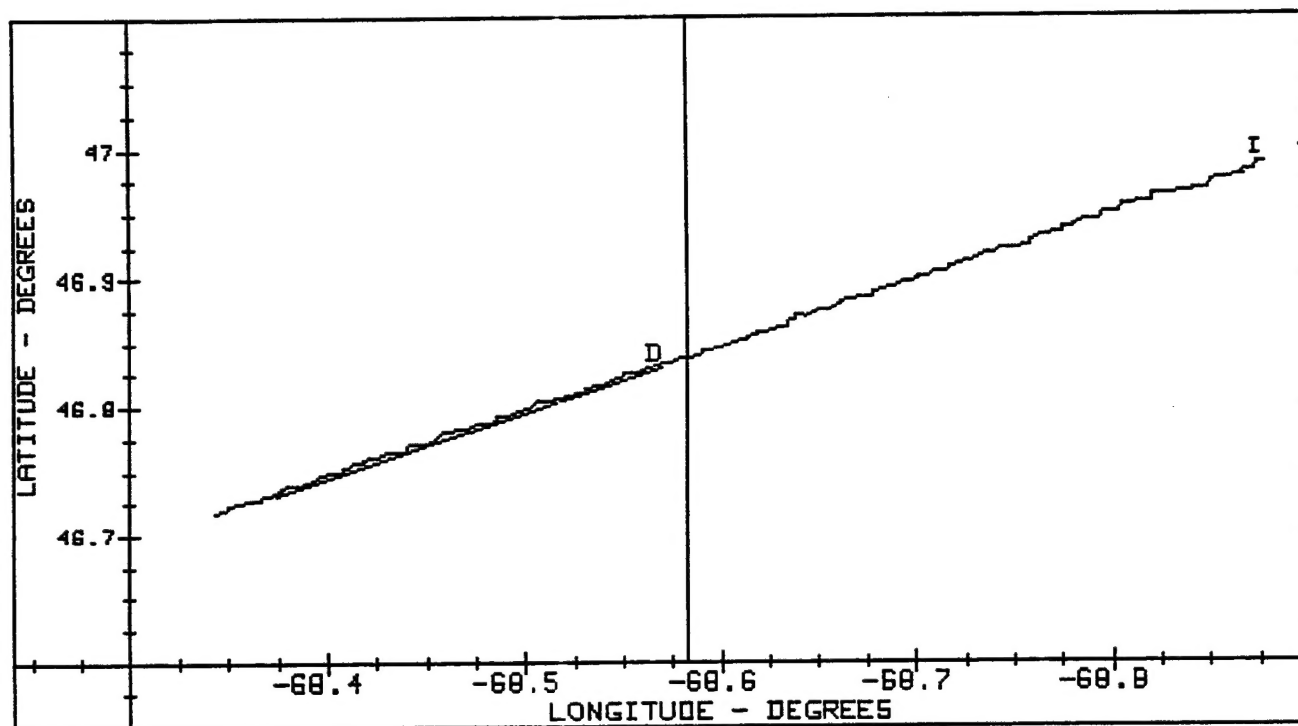
P Band Power

DAY 170 TIME 0:6 PASS 14 m= 52.64, sd= 22.4936



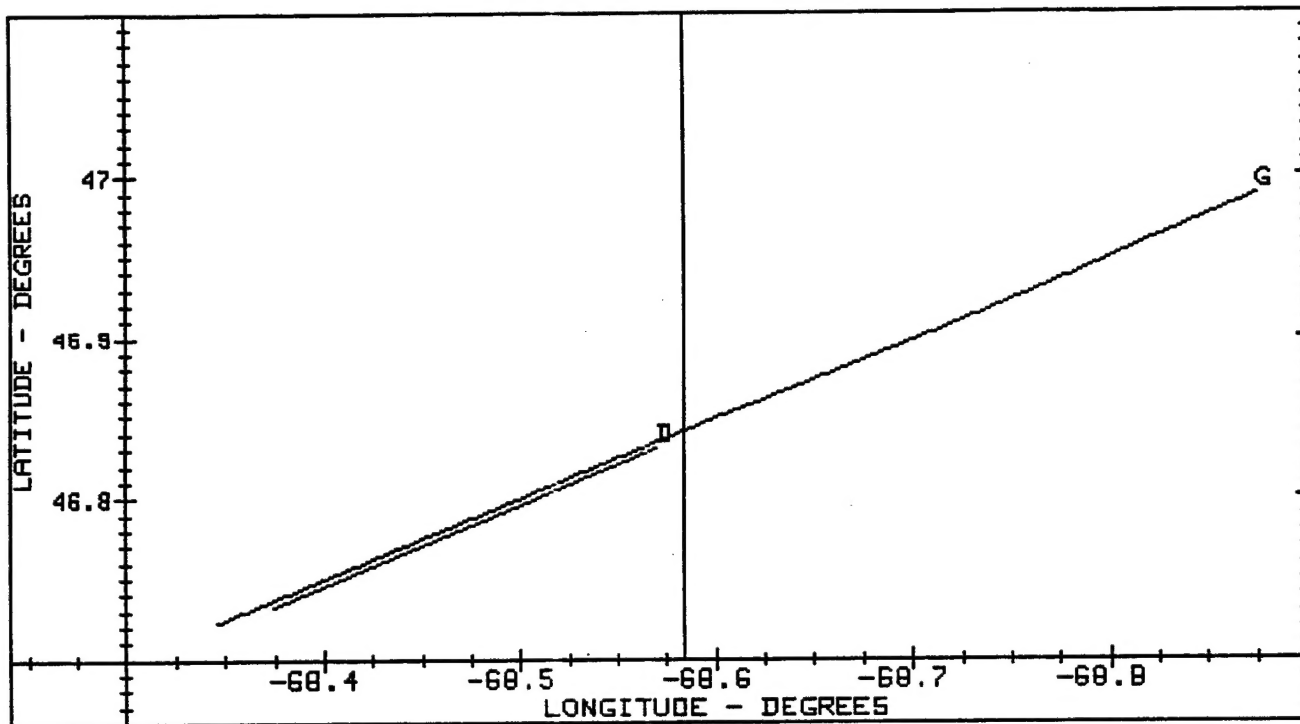
INS AIRCRAFT POSITION

DAY 178 TIME 0:6 PASS 14



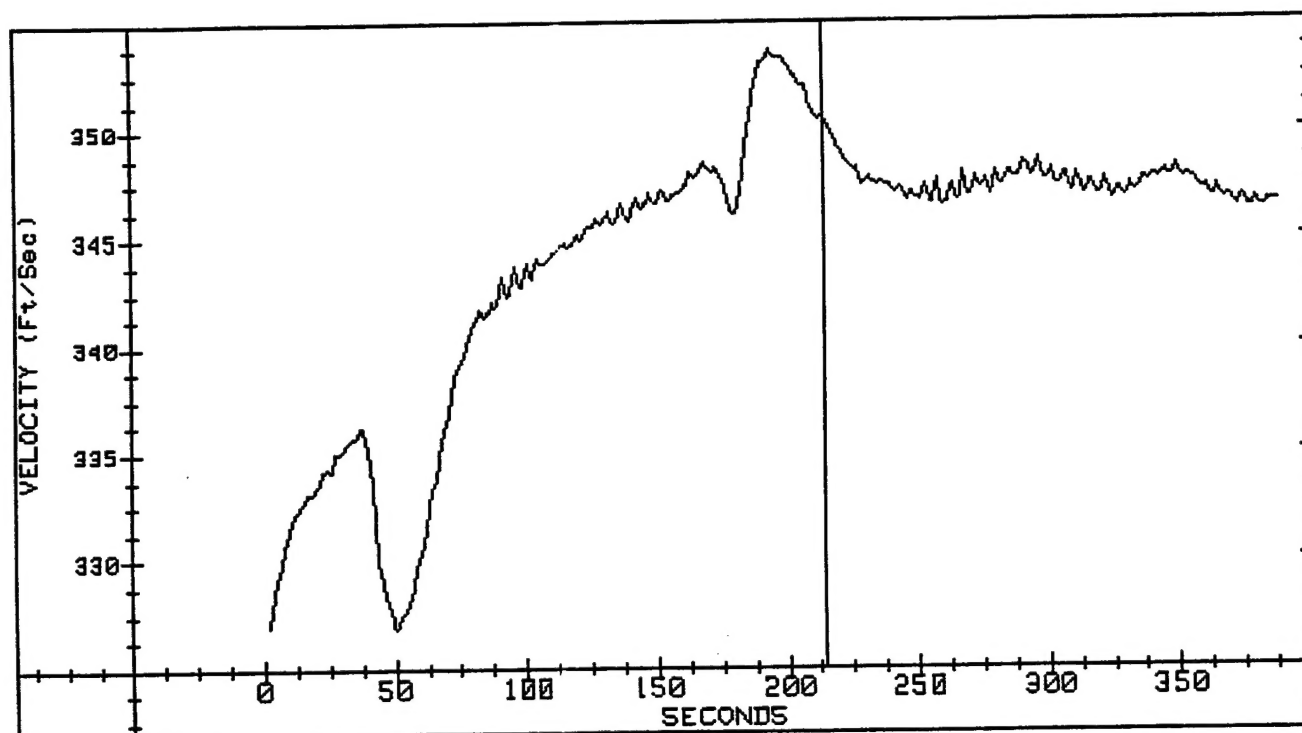
GPS AIRCRAFT POSITION

DAY 178 TIME 0:6 PASS 14



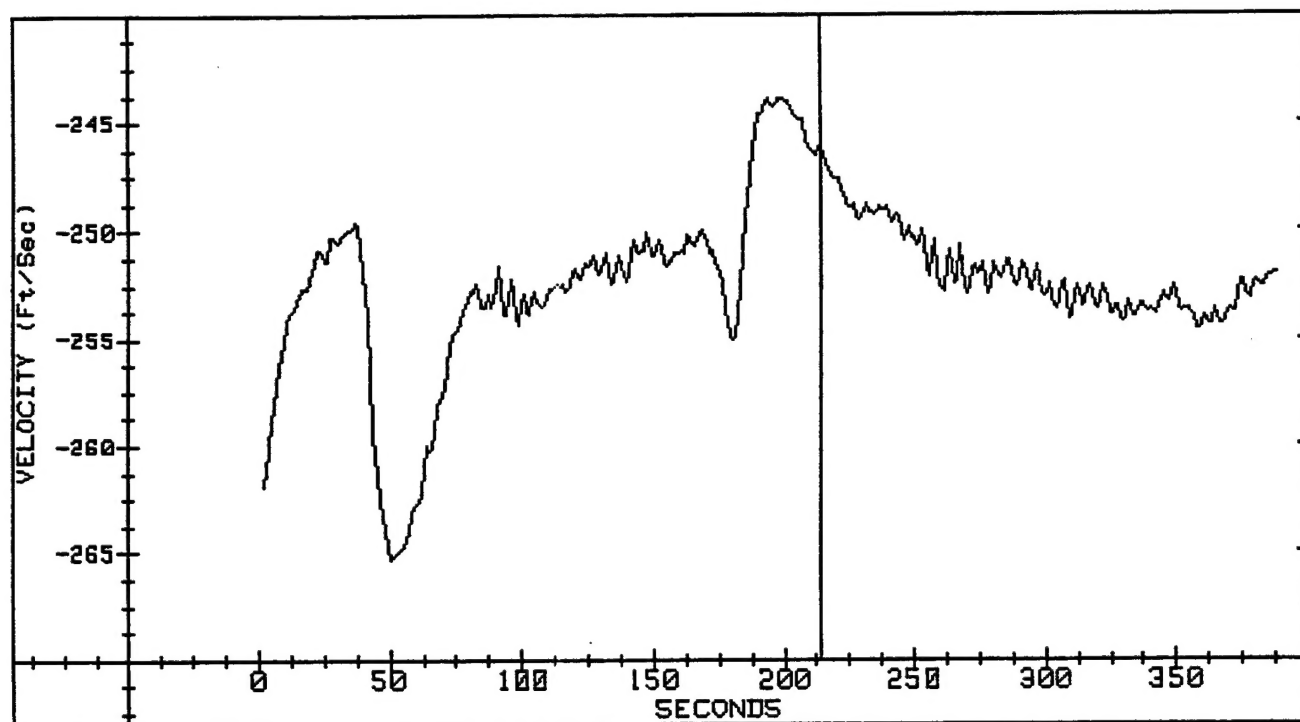
GPS V_e

DAY 178 TIME 0:6 PASS 14 m= 347.3, sd= .491663



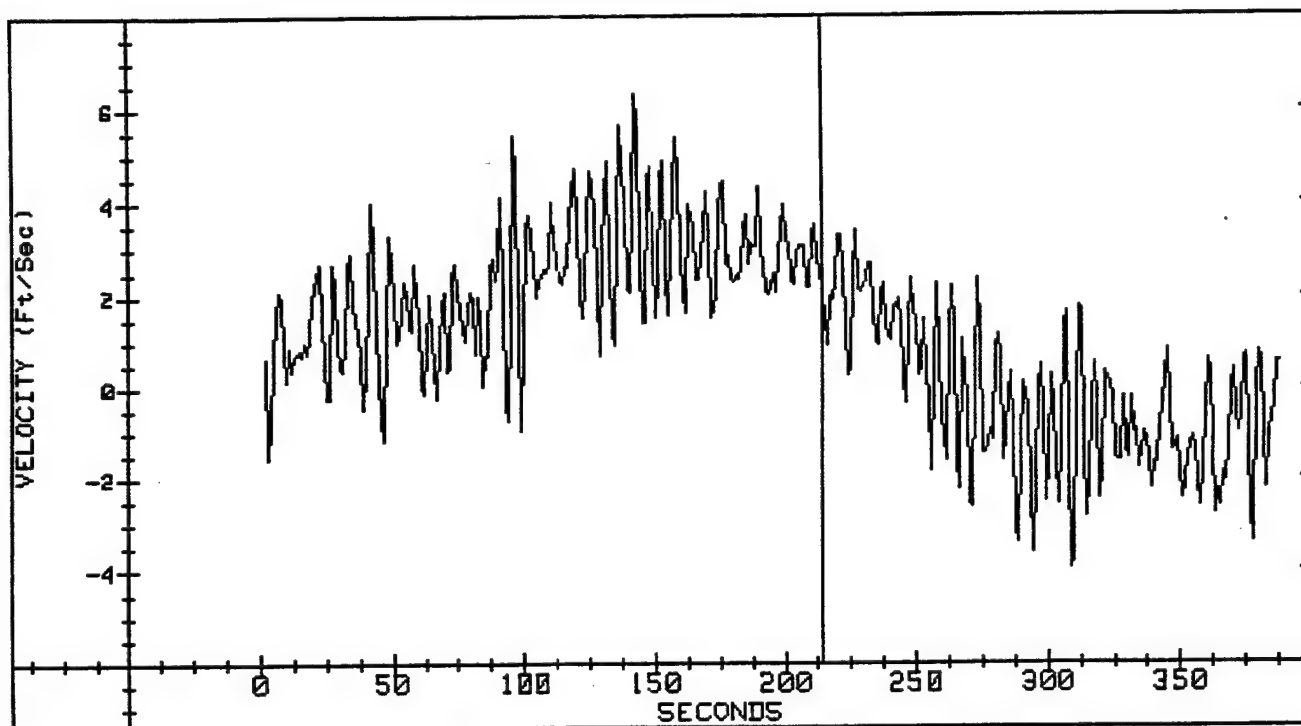
GPS Vn

DAY 178 TIME 0:6 PASS 14 m- -252.3, sd- 1.50213



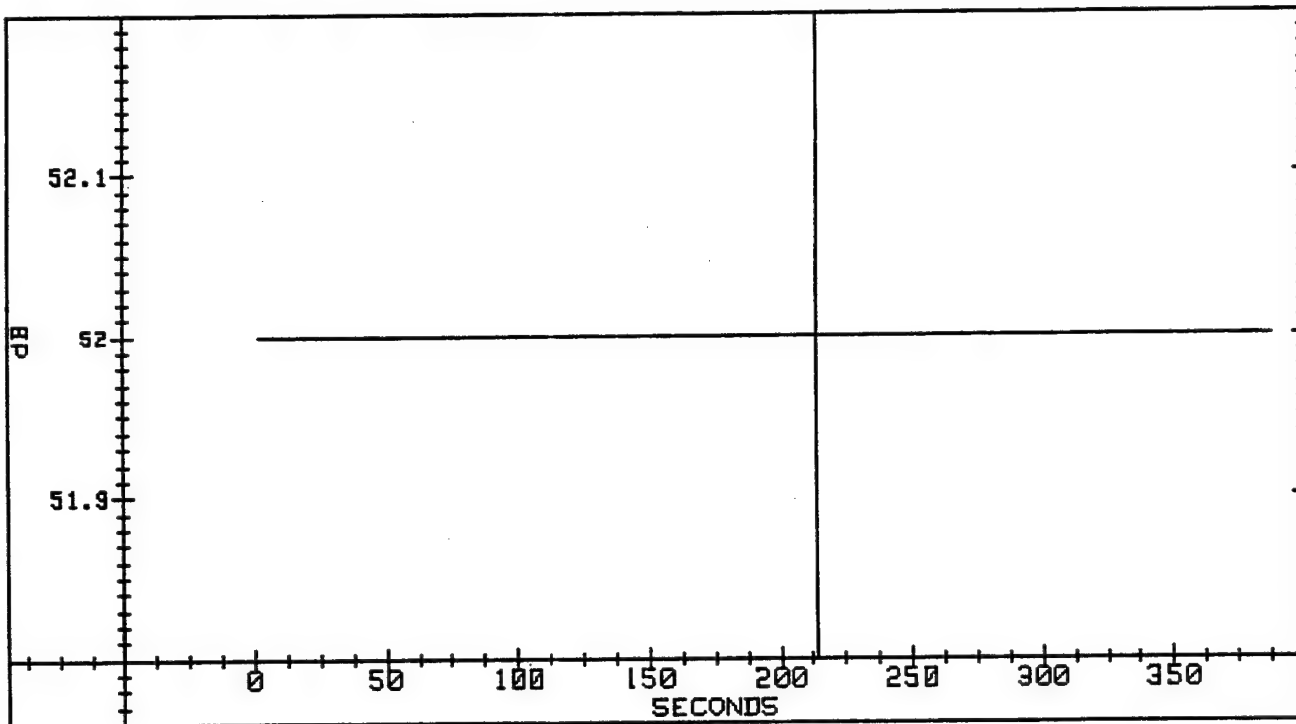
GPS Vv

DRY 178 TIME 0:6 PASS 14 m= -.4736, sd= 1.52996



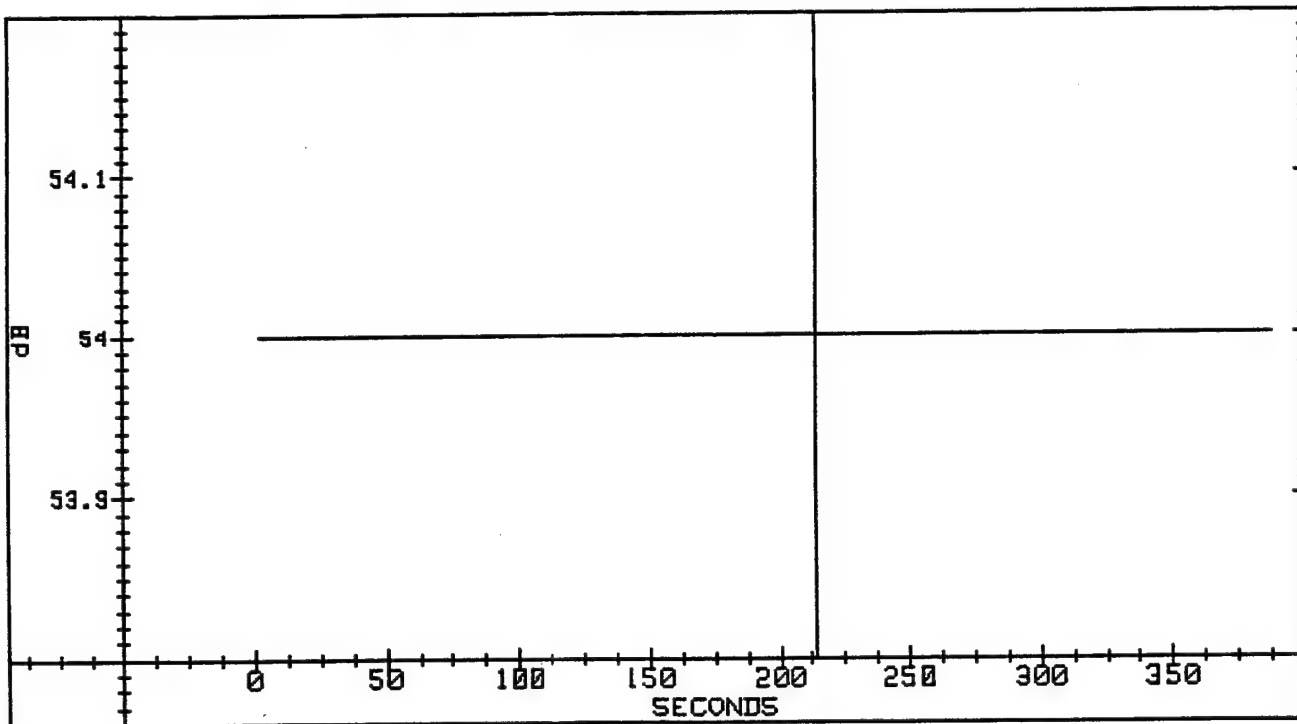
Ch1 RES Attenuation

DAY 178 TIME 0:6 PASS 14 m= 52, sd= 0



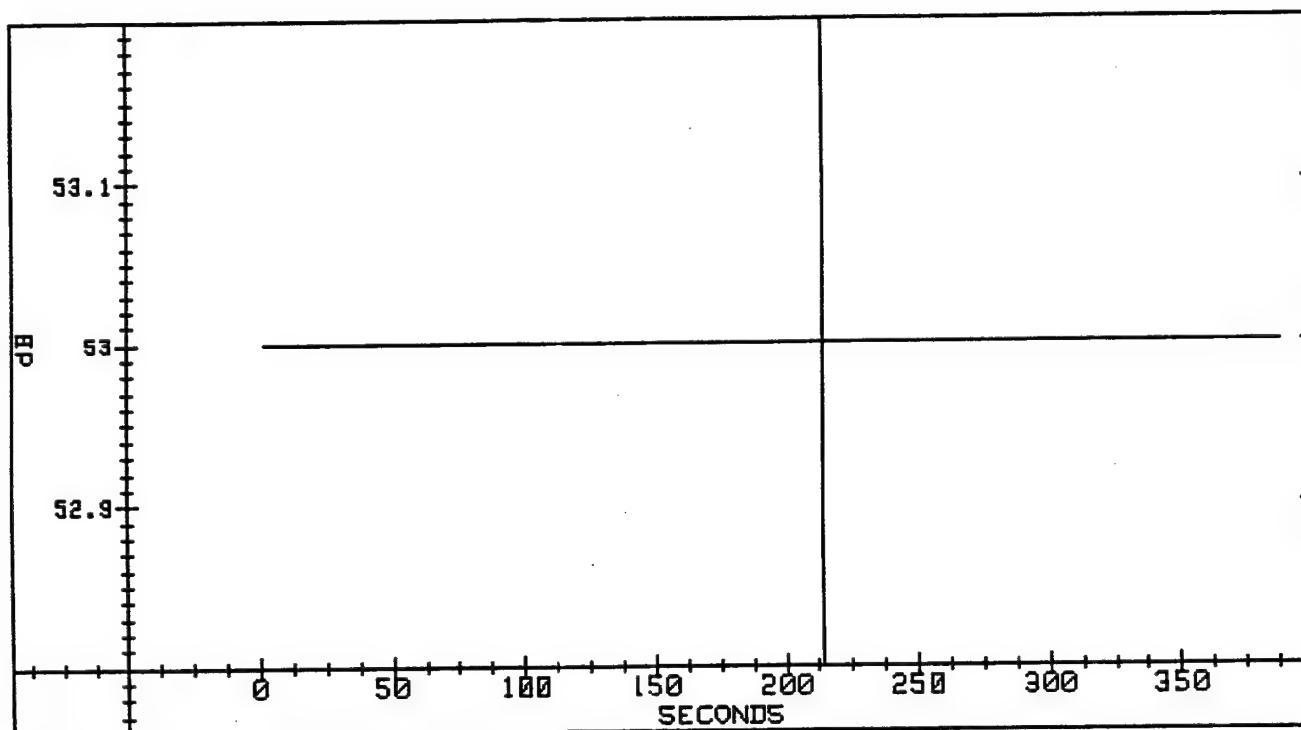
Ch2 RES Attenuation

DAY 178 TIME 0:6 PASS 14 m= 54, sd= 0



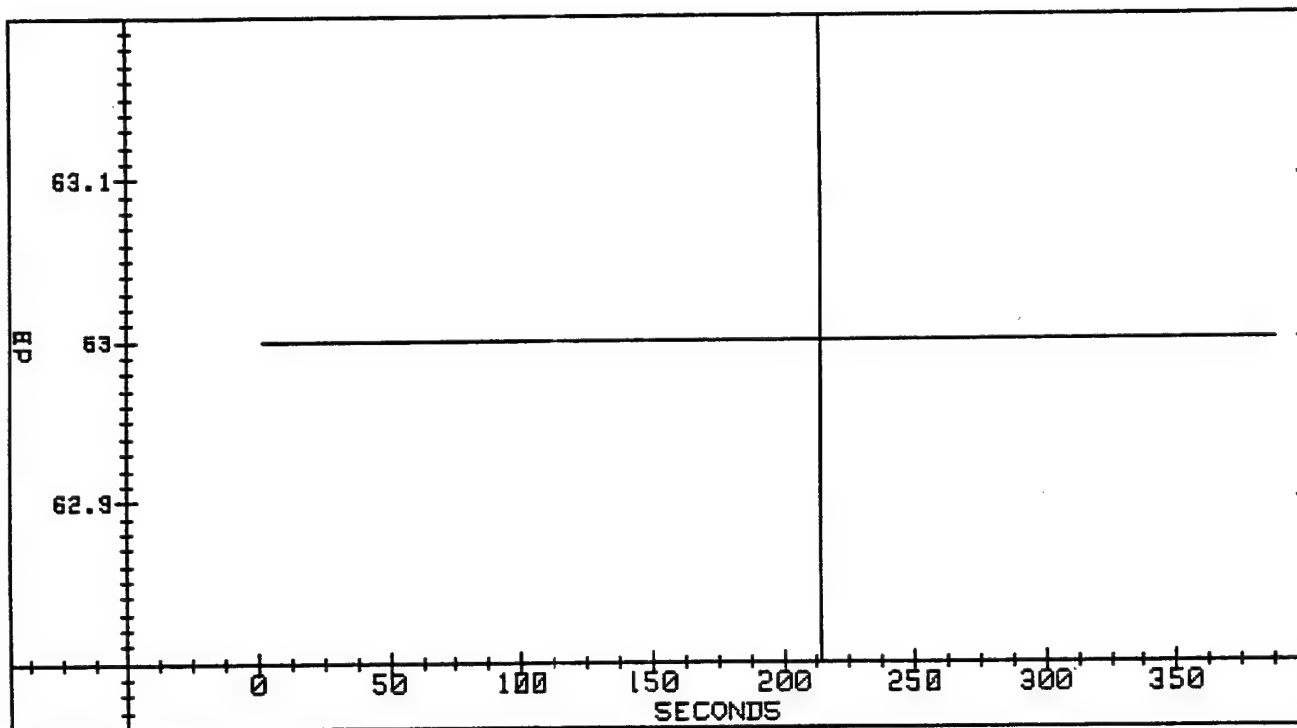
Ch3 RES Attenuation

DAY 178 TIME 0:6 PASS 14 m= 53, sd= 0



Ch4 RES Attenuation

DAY 178 TIME 0:6 PASS 14 m= 63, sd= 0

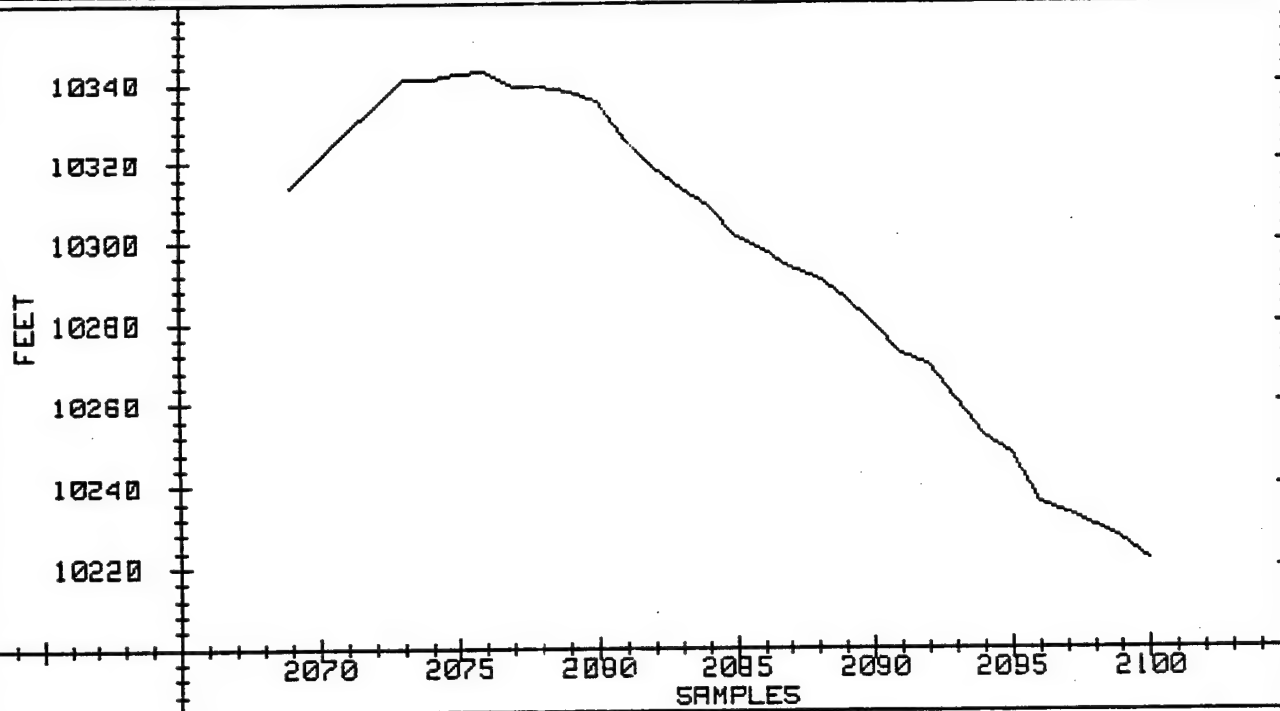


GPS ALTITUDE

MEAN= 10296.3 STANDARD DEVIATION= 39.4685

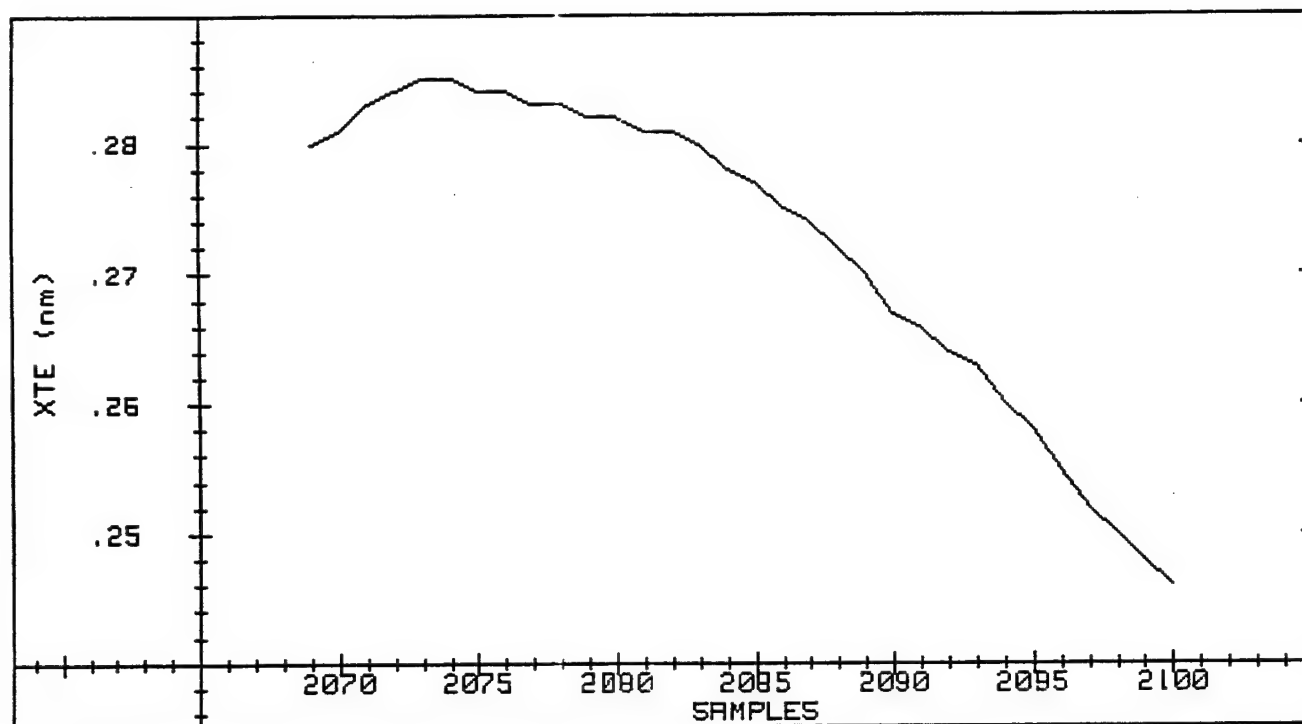
DATE: June 26, 1995 PASS 14

OFF
ON
BAR



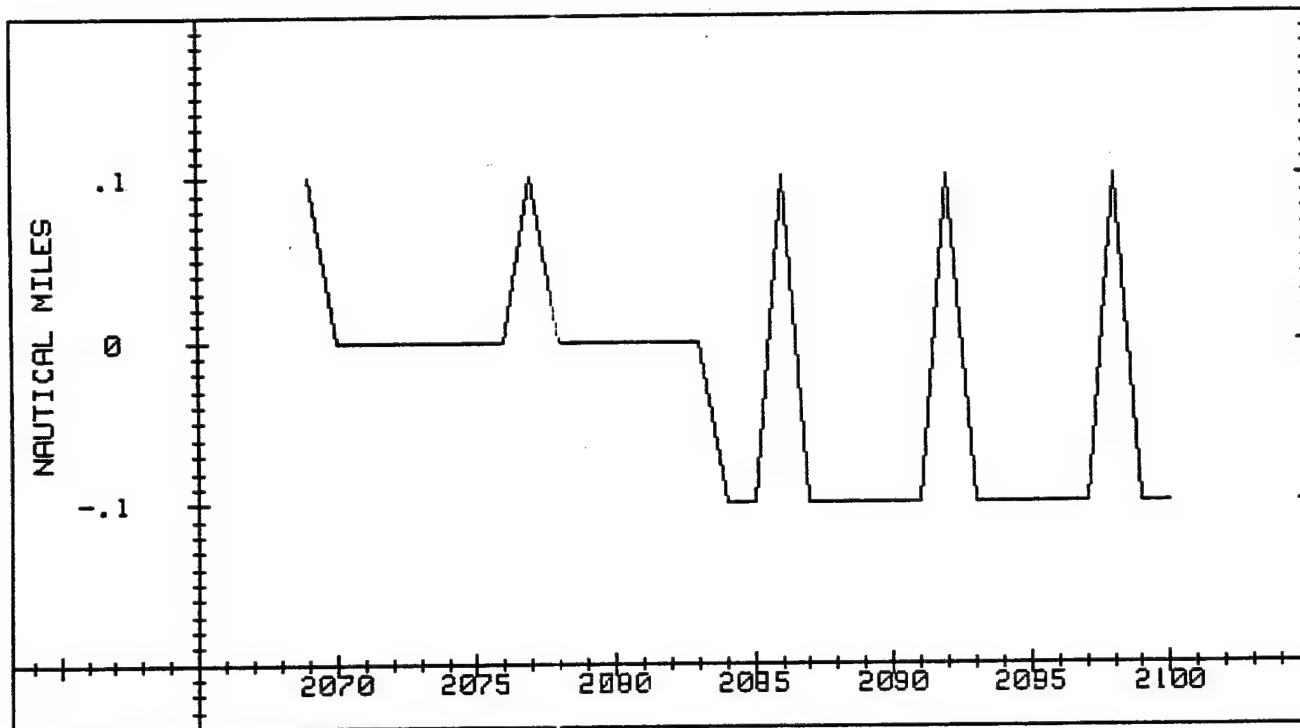
GPS Cross Track Error

MEAN= .272281 STANDARD DEVIATION= .0121841
DATE: June 26, 1995 PASS 14

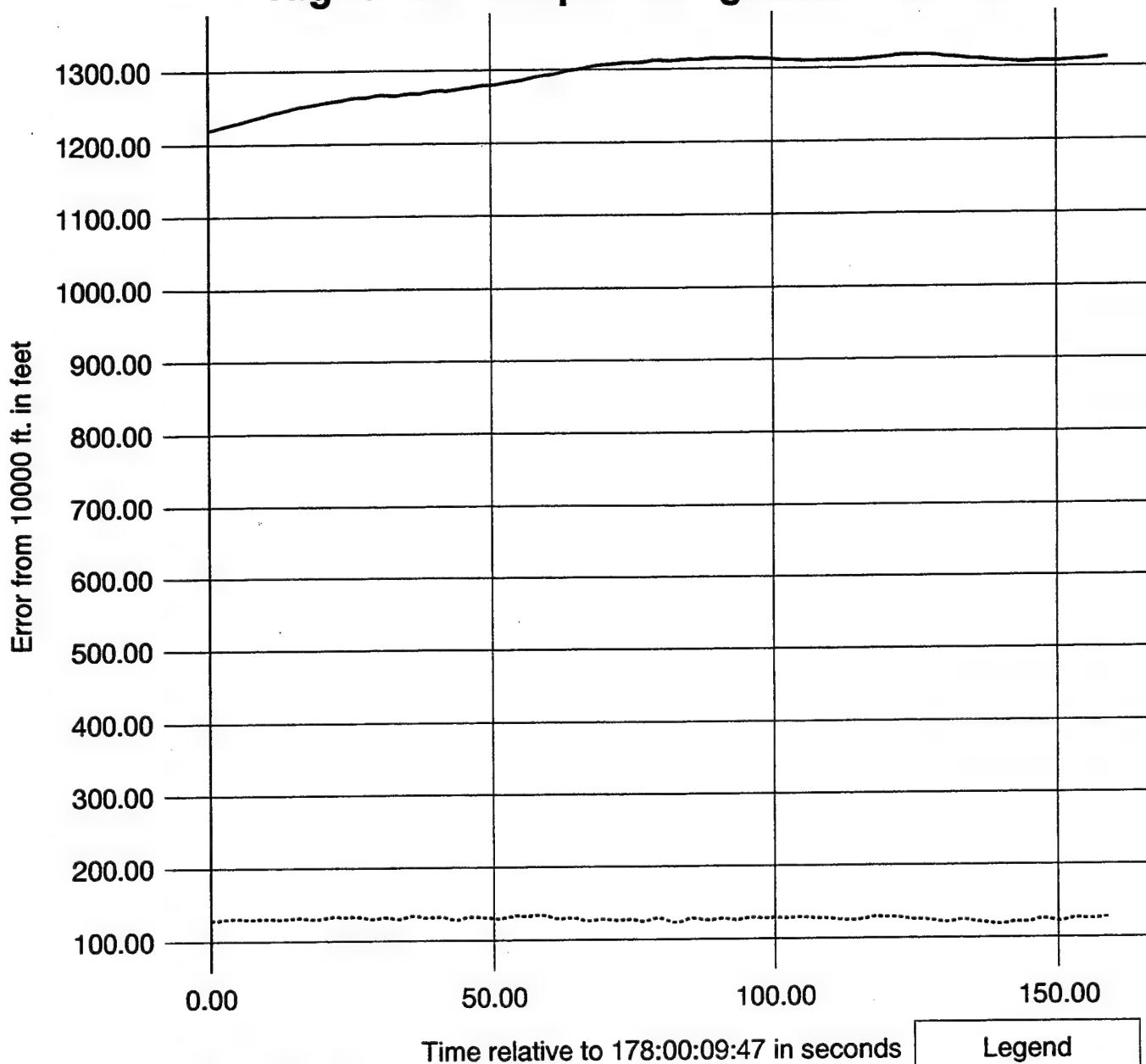


INS CROSS TRACK ERROR

MEAN= -.028125 STANDARD DEVIATION= .071739
DATE: June 26, 1995 PASS 14



Portage, ME - June 26, 1995 - Pass 14 - Xtk. and Alt. Errors
Higher alt. and port are greater than zero



	Mean	St. Dev.
ALT.	127.82	3.49
XTK.	1291.49	26.63

Legend	
—	P5-xt
.....	P5-alt

27 Jun 1995
Tape: E1422

Post-line Data Sheet
Line 27
Mission: PORTAGE MAINE, DAY

Time: 178:00:22:27
Pass 15
Req.# 15

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	10000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	9989 ft s.d.=	3 Swath Ctr Ang:	30.0°	30.0°	30.0°	30.0°
Slt. rng:	18680 ft	Tgt Dep Ang:	30.0°	30.0°	30.0°	30.0°
Look:	Right	St rng (ft):	17141	17141	17141	17141
Depr Ang:	25.0°	Near Rng Dep:	35.6°	35.6°	35.6°	35.6°
Des. trk:	336.0°	Far Rng Dep:	17.5°	17.5°	17.5°	17.5°
Start Sq:	90.0°	Atten (dB):	52.0	54.0	53.0	63.0
End Sq:	90.0°	RMS Video (%FS)	27.1	9.9	19.0	23.2

WAYPOINTS

Line_up:	N 46:28.11	W 68:24.09	Main Target: GP
Start:	N 46:39.08	W 68:31.14	Mocomp Point:
End:	N 46:48.21	W 68:37.06	Lat: N 46:44.73
			Long: W 68:30.56
From:	N 31:10.38	W 60:44.66	Tgt Trk: 0.0 Tgt Vel: 0.0
To:	N 61:16.22	W 82:32.56	Alt: 660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1	Filter damping is Hi -> 10 sec
Resolution: N/A	PRF Factor is FAST (262.5 kts)
Swath width: Single	Ave Gndspd: Real -> 249.7 kts
RMS Time Constant: 2^7	Mocomp Off for Chnl 1, 2, 3, 4
Position Reference: ON	GPS Vel/Pos Reference
Atten. Tracking: OFF	Adj Gnd Scene: 5000.0 ft
Range Gate Delta: 0.0 ft	Range Tracking is OFF
Azimuth Presum Rate: Presum6	Clutterlock Reference: OFF
TX Chirp Filename: CTL1U2B	RX Chirp Filename: CRL1N0A
Ave Ref Vel -> .3 fps (s.d.= .9)	
Ave Fil Vel -> -.5 fps (s.d.= .7)	

NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation: 0.0°	Starting: 6780 ft	(2)
L: -70.0	Azimuth: 0.0°	Ending: 8025 ft	(2)
C: -70.0	Pitch: 0.0°		
P: 47.0			

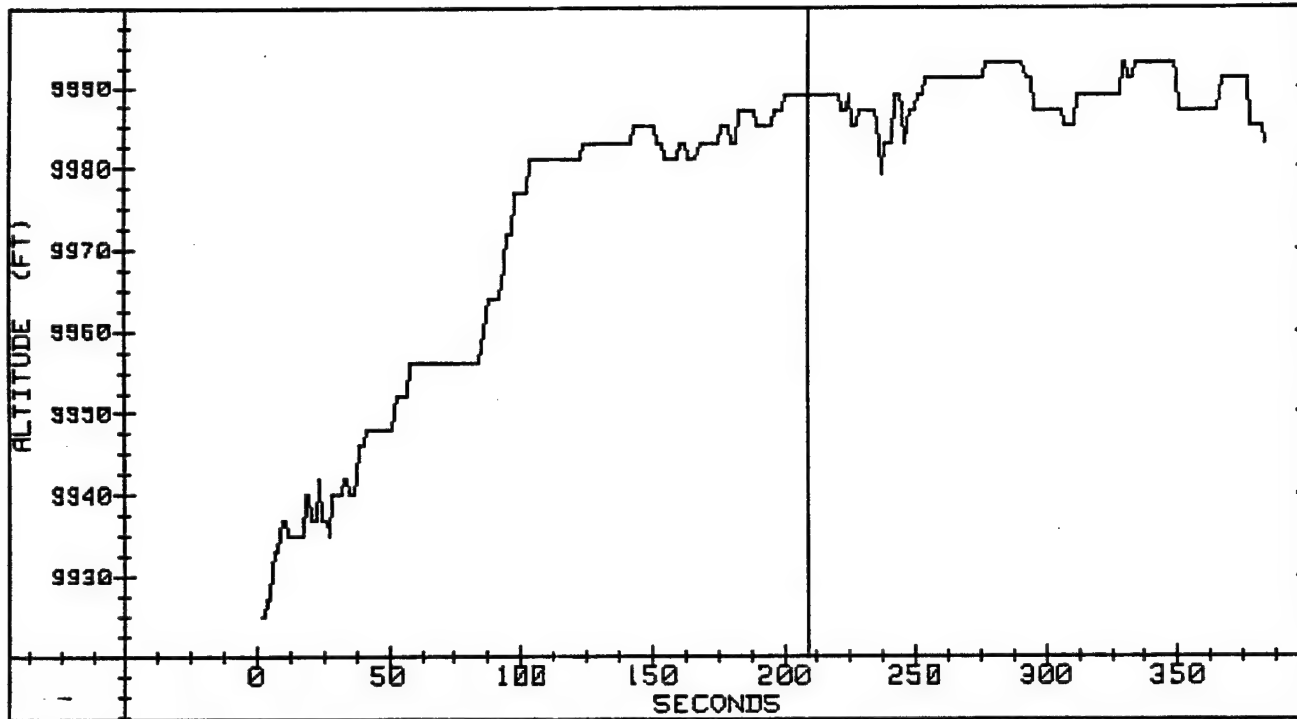
Vel Bias	CAL Atten	LINE Map Time (UCT)
X: 1035.0	X: 63.8 dB	Start: 00:22:27
Y: -433.0	L: 63.8 dB	End: 00:25:11
Z: 6697.0	C: 63.8 dB	

Mocomp Counters

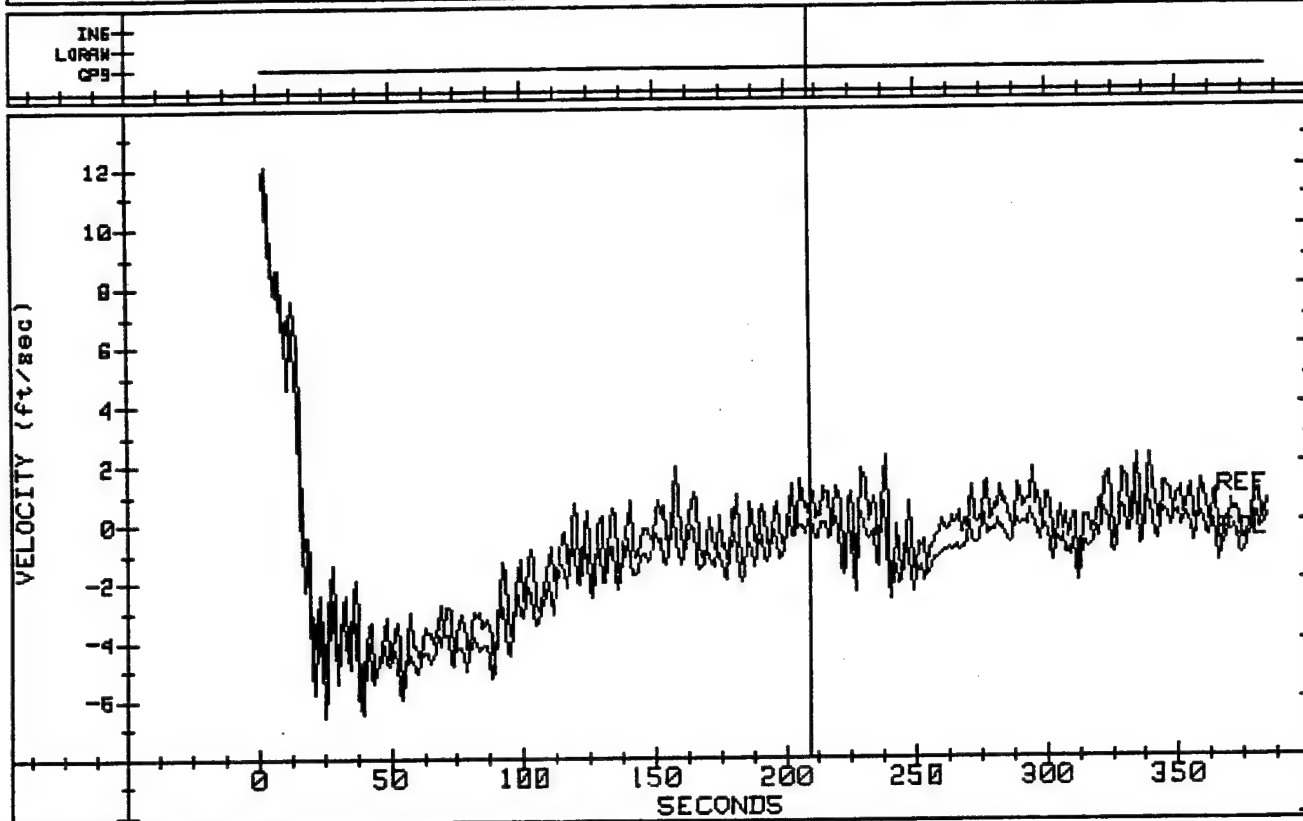
Start:	908049	000DDB11h	CPA (UCT): 00:00:00
End:	935547	000E467Bh	Alt: 0 ft (GPS)
			Lat: N 0:00: 0
			Lon: E 0:00: 0

BARO ALTITUDE

DAY 170 TIME 0:10 PASS 15 m= 9989, sd= 2.97264

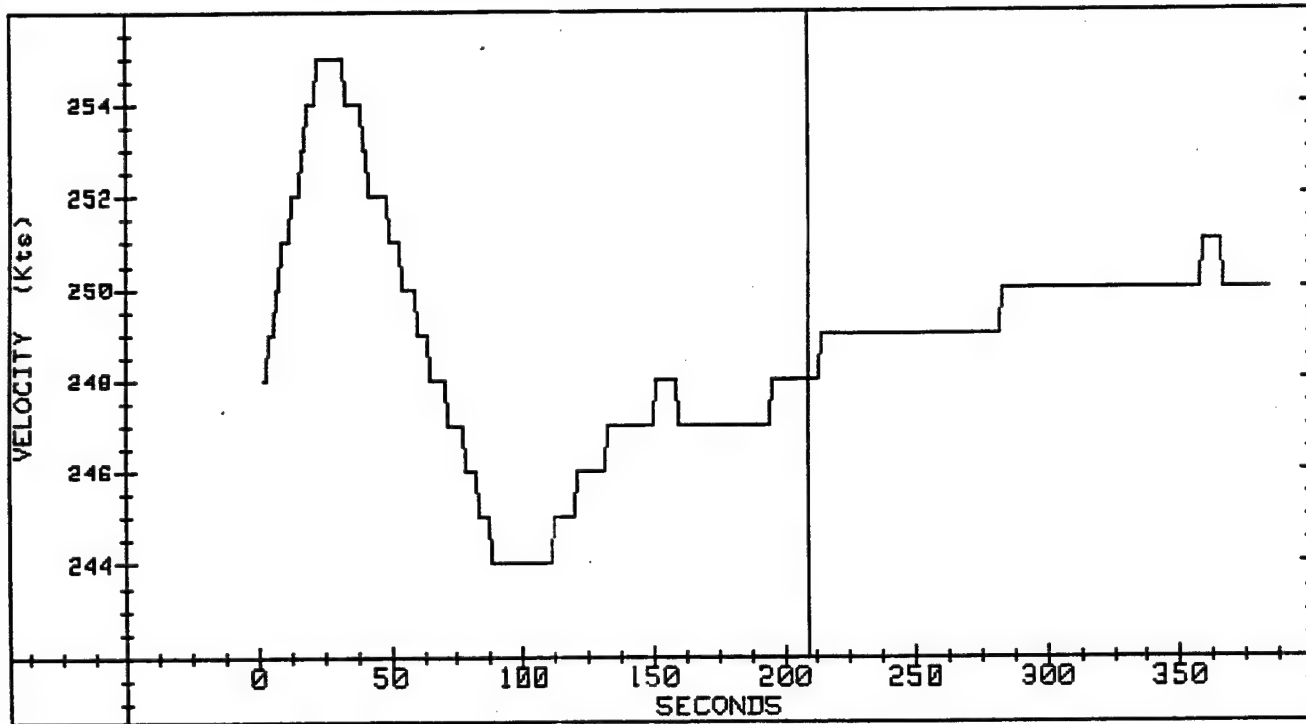


FILTERED vs. REF. VELOCITY
DAY 178 TIME 0:18 PASS 15



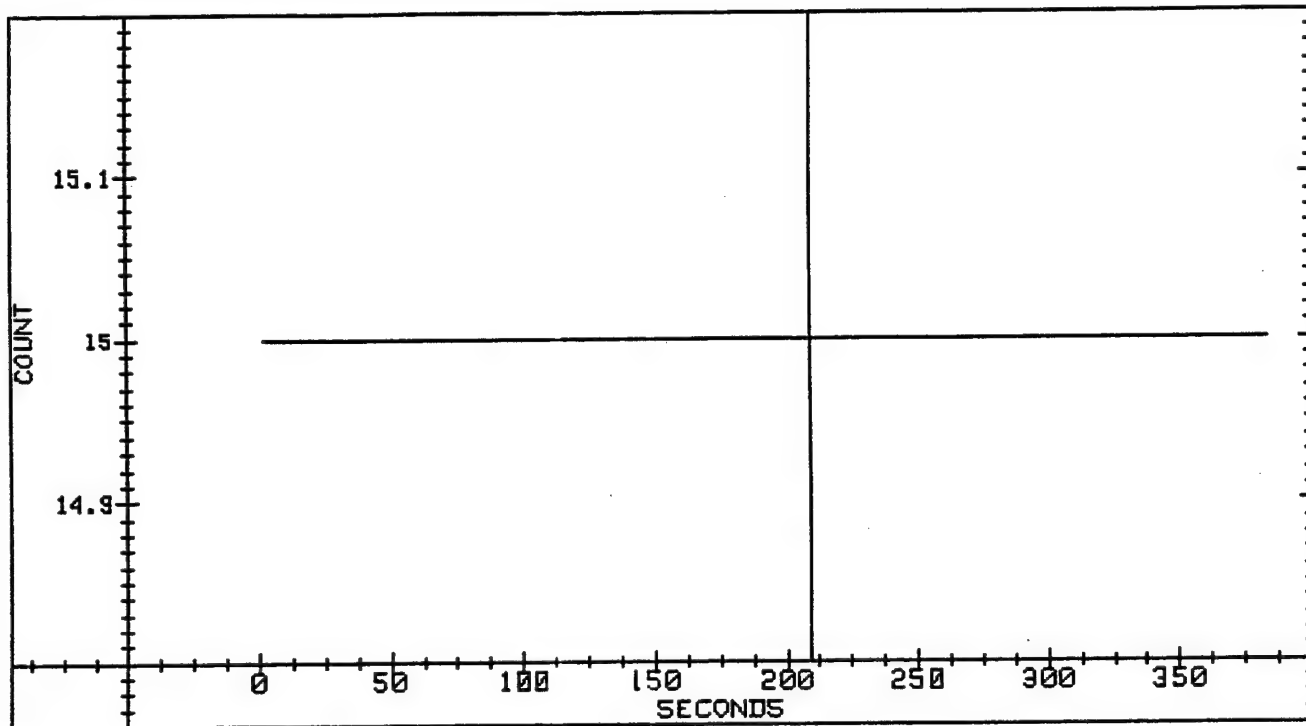
INS GROUND SPEED

DRY 178 TIME 0:18 PASS 15 m= 249.7, sd= .564971



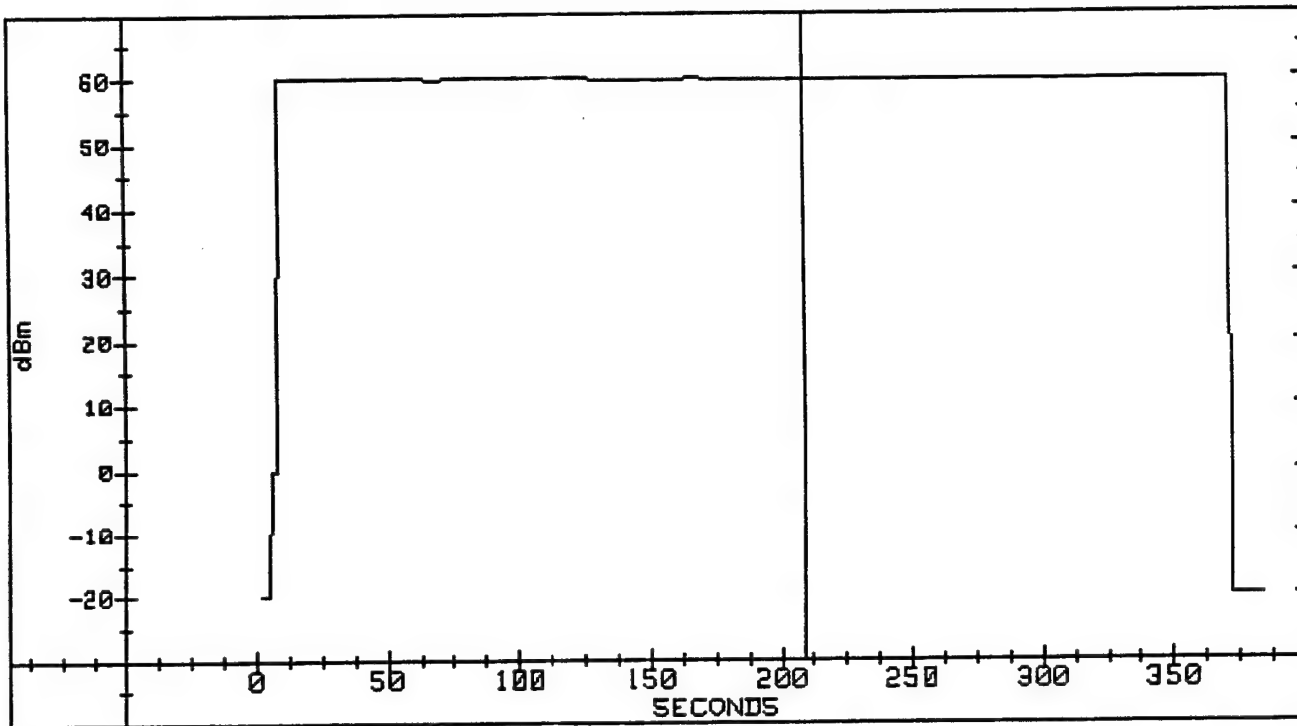
PASS NUMBER

DAY 178 TIME 0:18 PASS 15 m= 15, sd= 0



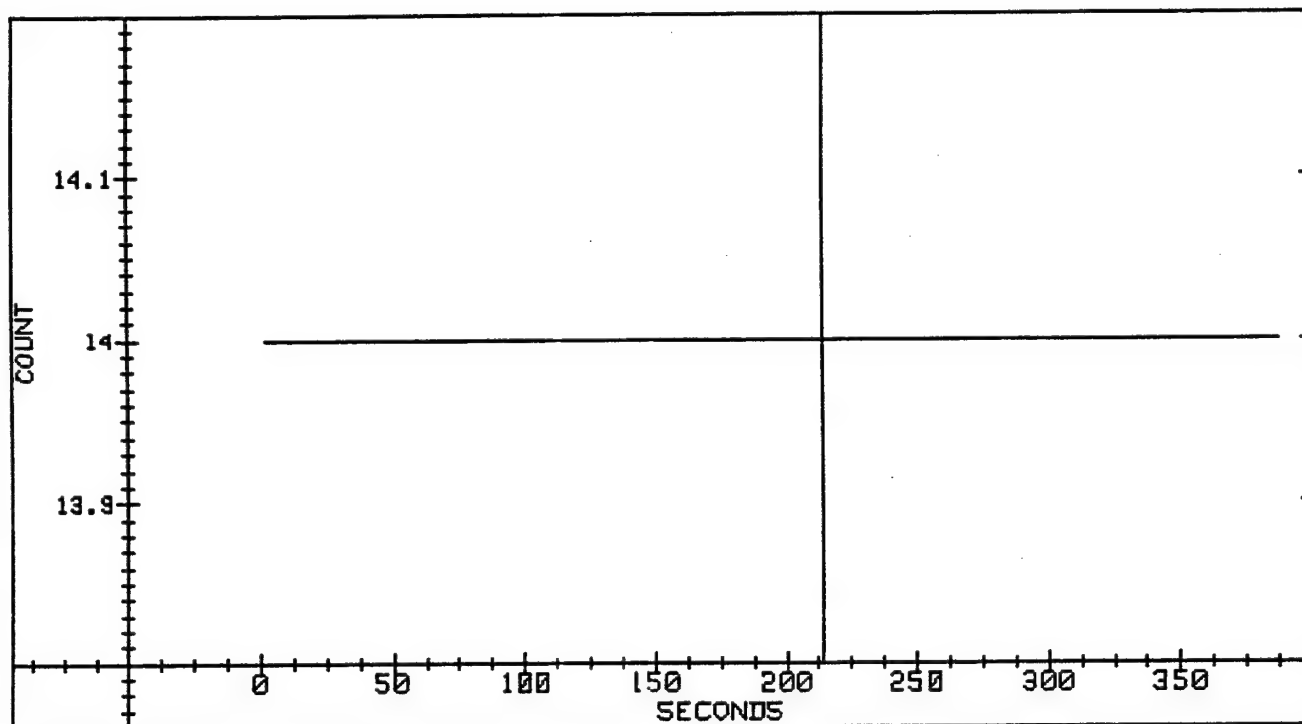
P Band Power

DAY 170 TIME 0:10 PASS 15 m= 53.51, sd= 21.498



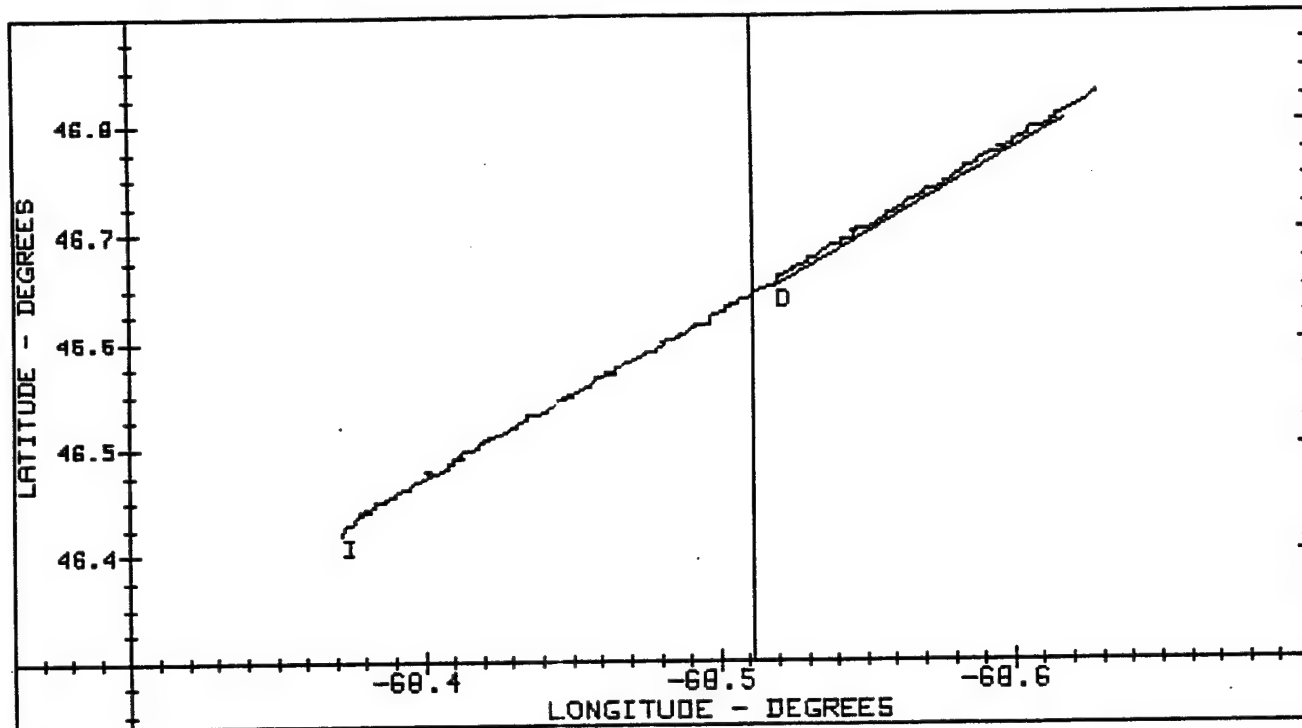
PASS NUMBER

DAY 178 TIME 0:6 PASS 14 m= 14, sd= 0



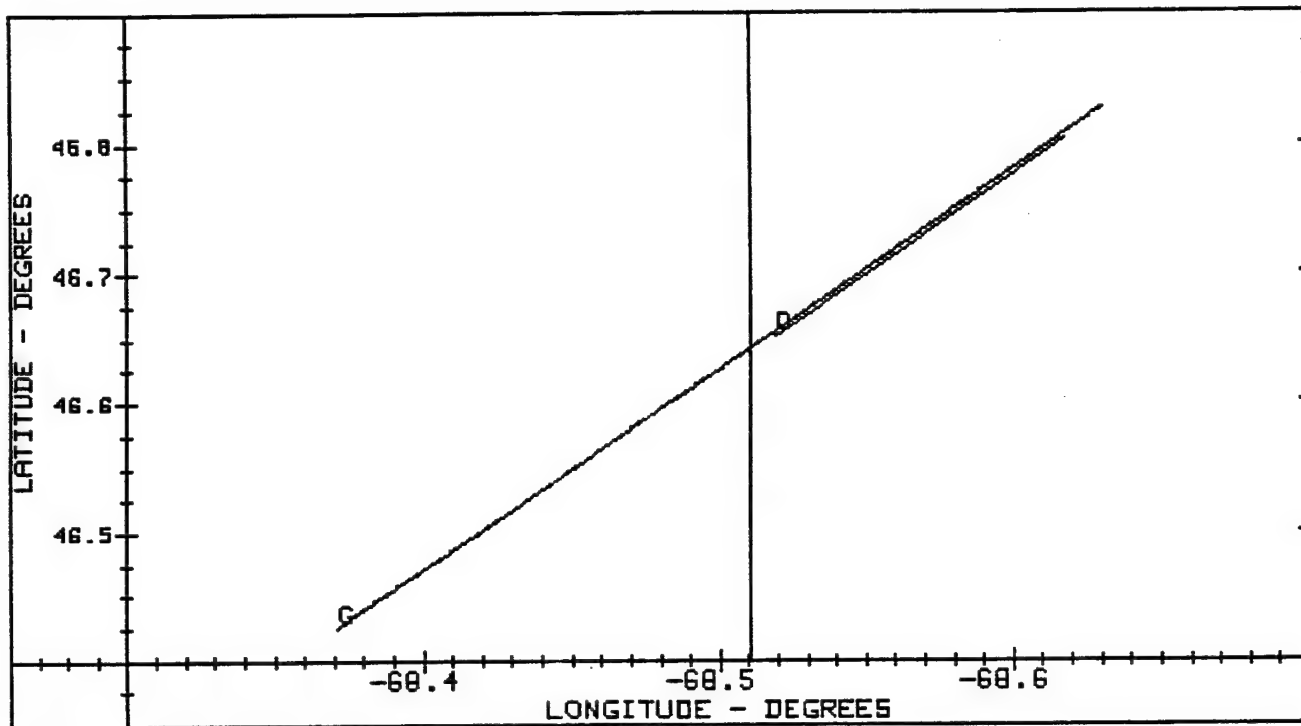
INS AIRCRAFT POSITION

DAY 178 TIME 0:18 PASS 15



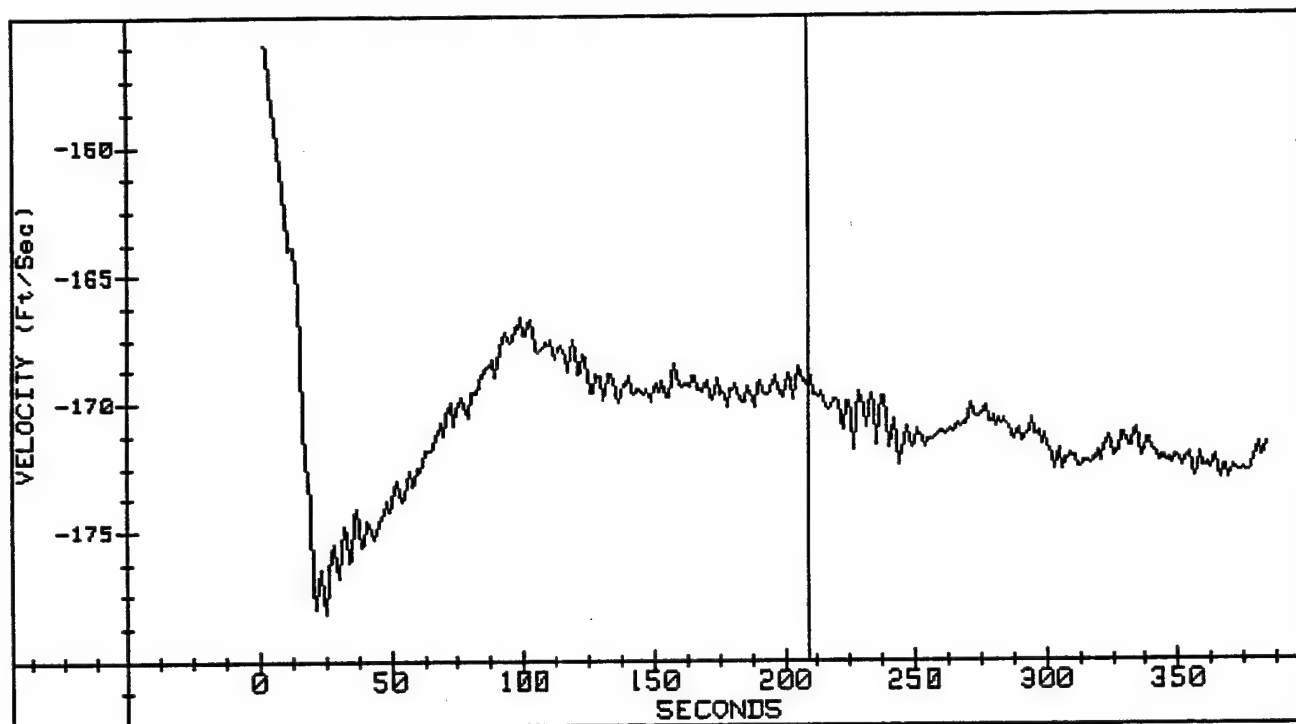
GPS AIRCRAFT POSITION

DAY 178 TIME 0:18 PASS 15



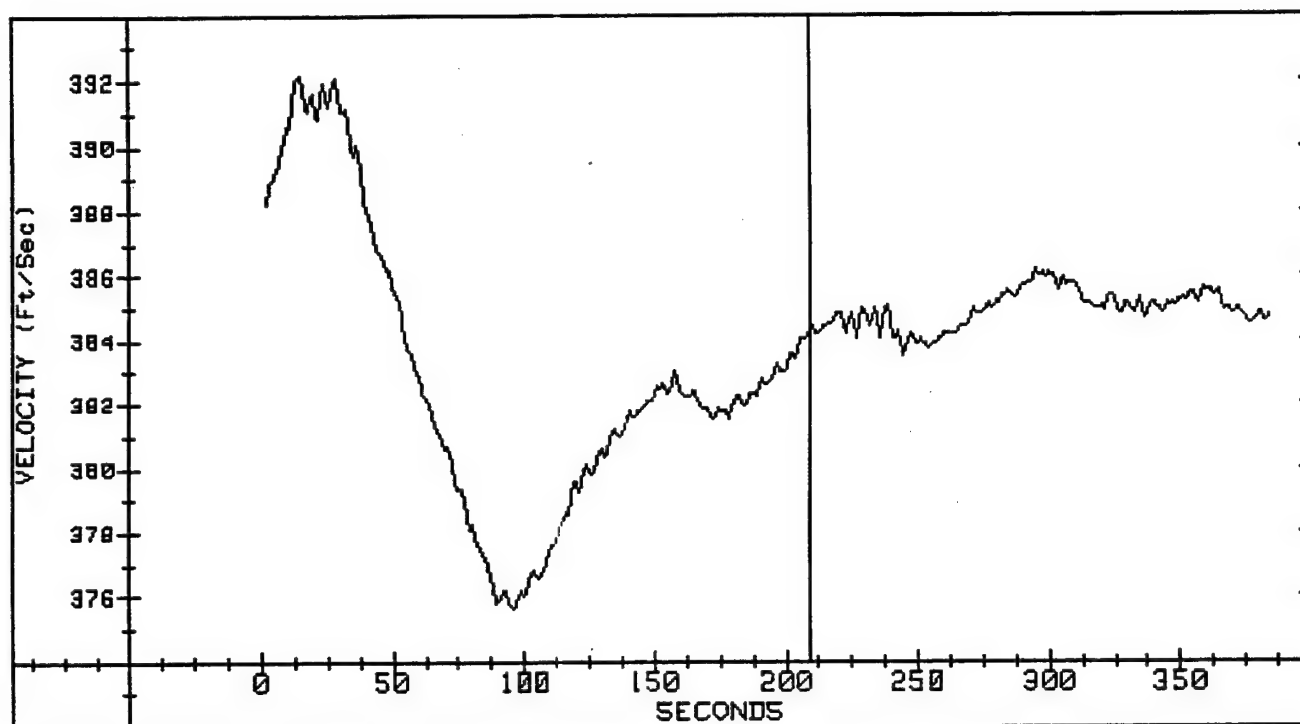
GPS V_e

DAY 178 TIME 0:18 PASS 15 m= -171.6, sd= .010777



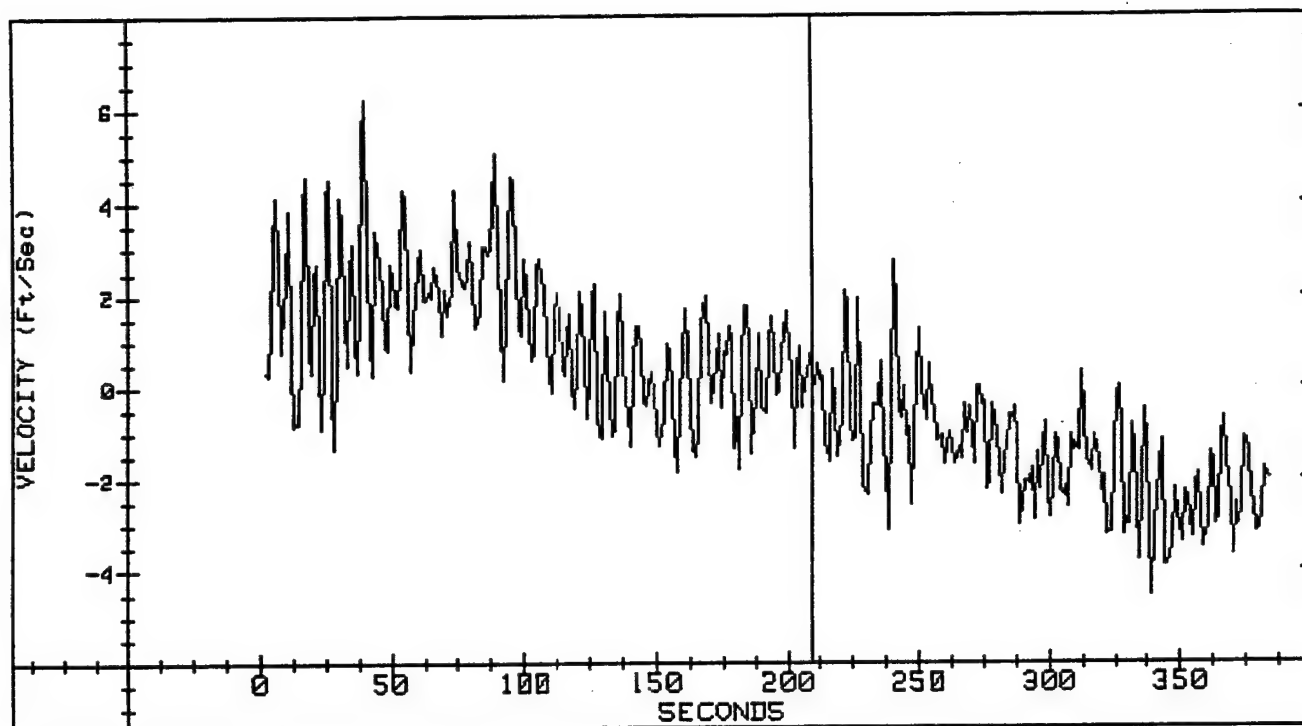
GPS Vn

DAY 17B TIME 0:10 PASS 15 m= 385. sd= .577393



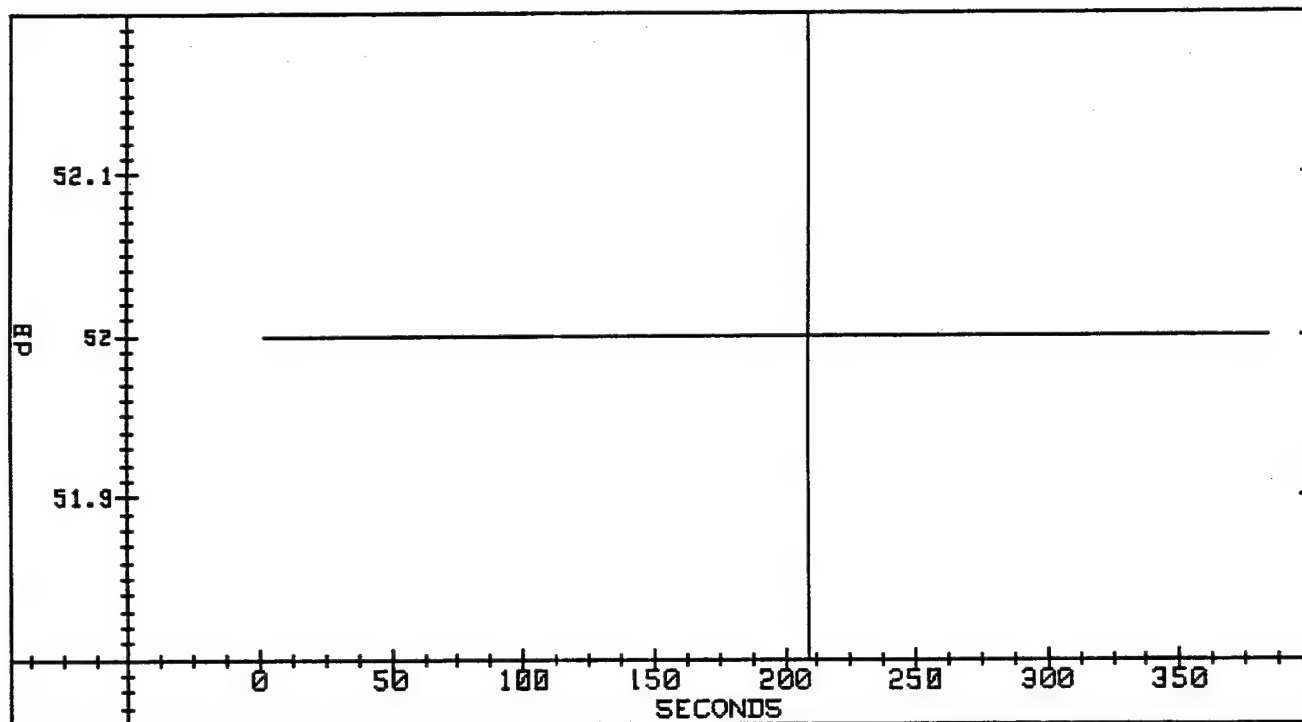
GPS Vv

DAY 170 TIME 0:10 PASS 15 m= -1.544, sd= 1.23151



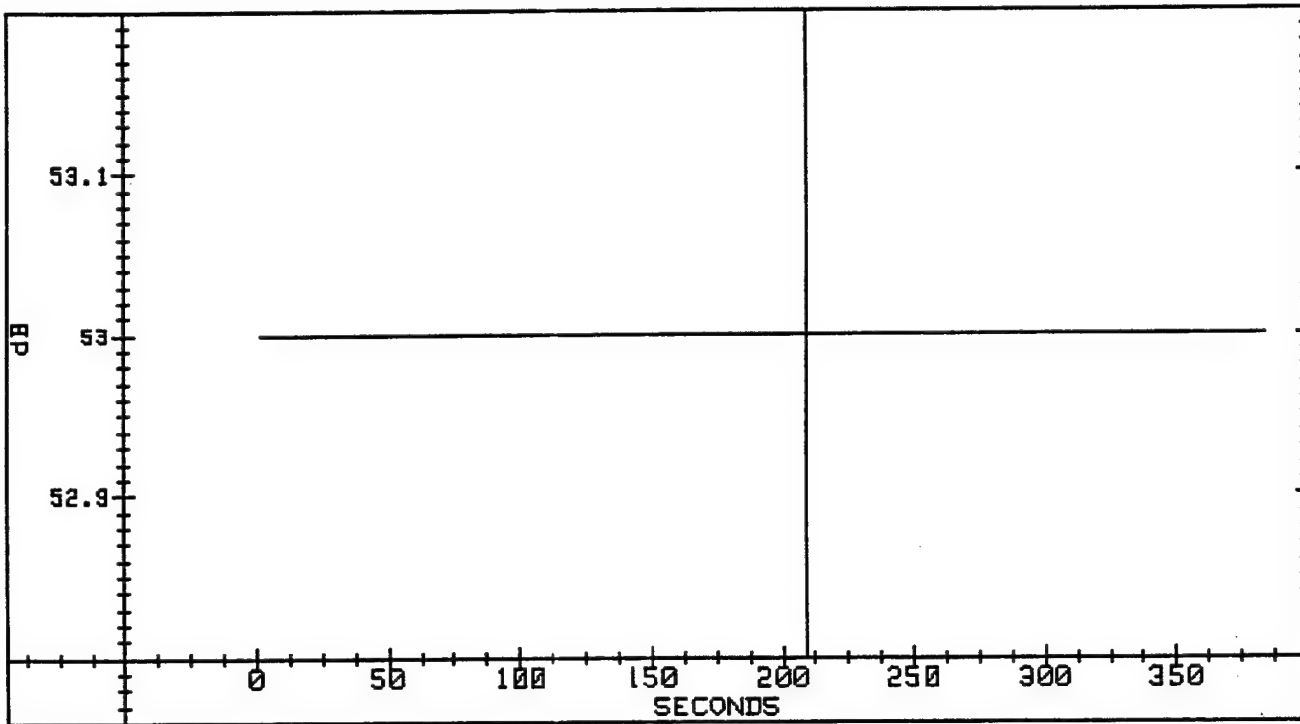
Ch1 RES Attenuation

DAY 170 TIME 0:10 PASS 15 m= 52, sd= 0



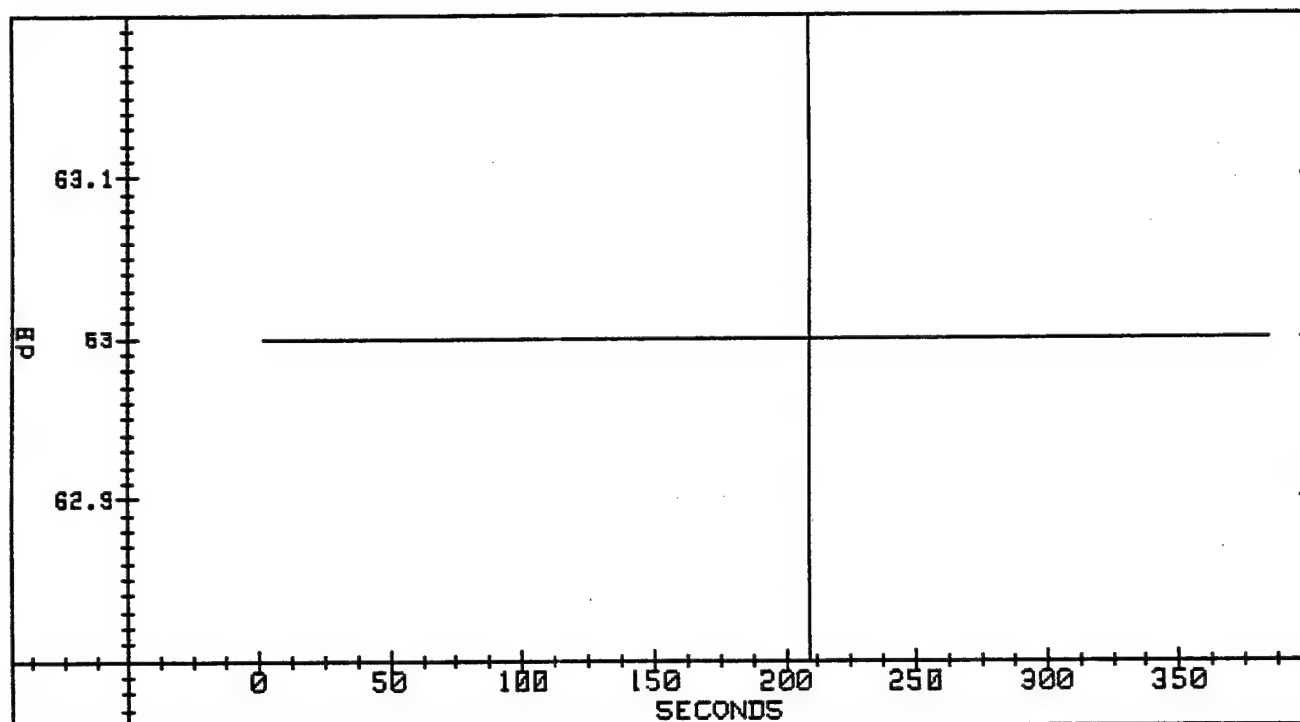
Ch3 RES Attenuation

DAY 170 TIME 0:10 PASS 15 m= 53, sd= 0



Ch4 RES Attenuation

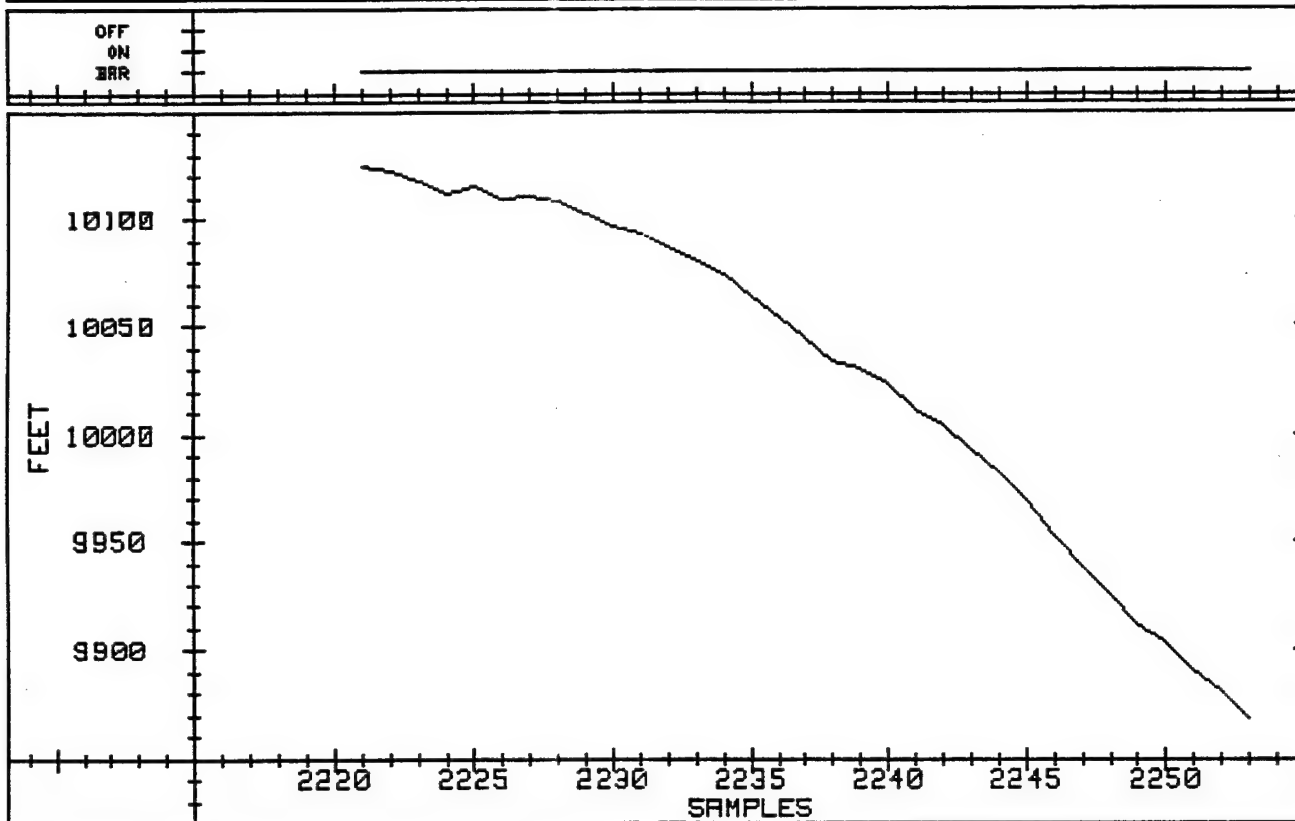
DAY 170 TIME 0:10 PASS 15 m= 63, sd= 0



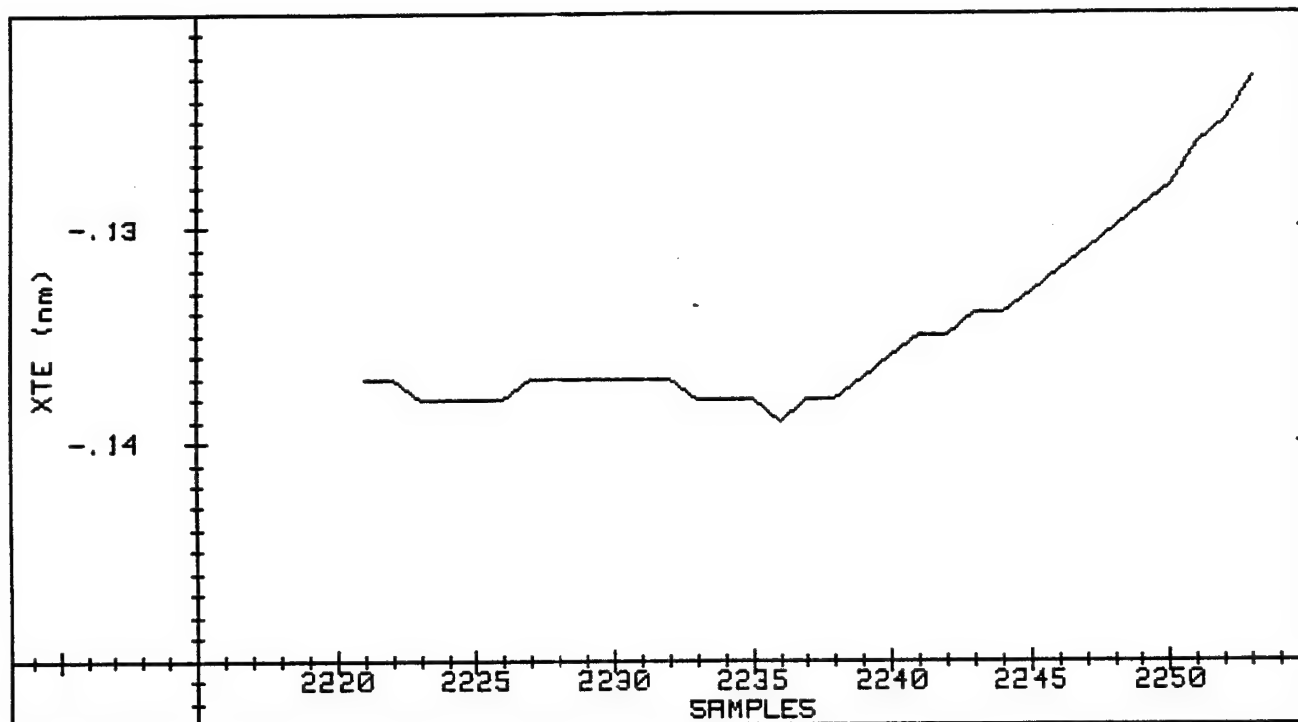
GPS ALTITUDE

MEAN= 10028.4 STANDARD DEVIATION= 80.2277

DATE: June 26, 1995 PASS 15

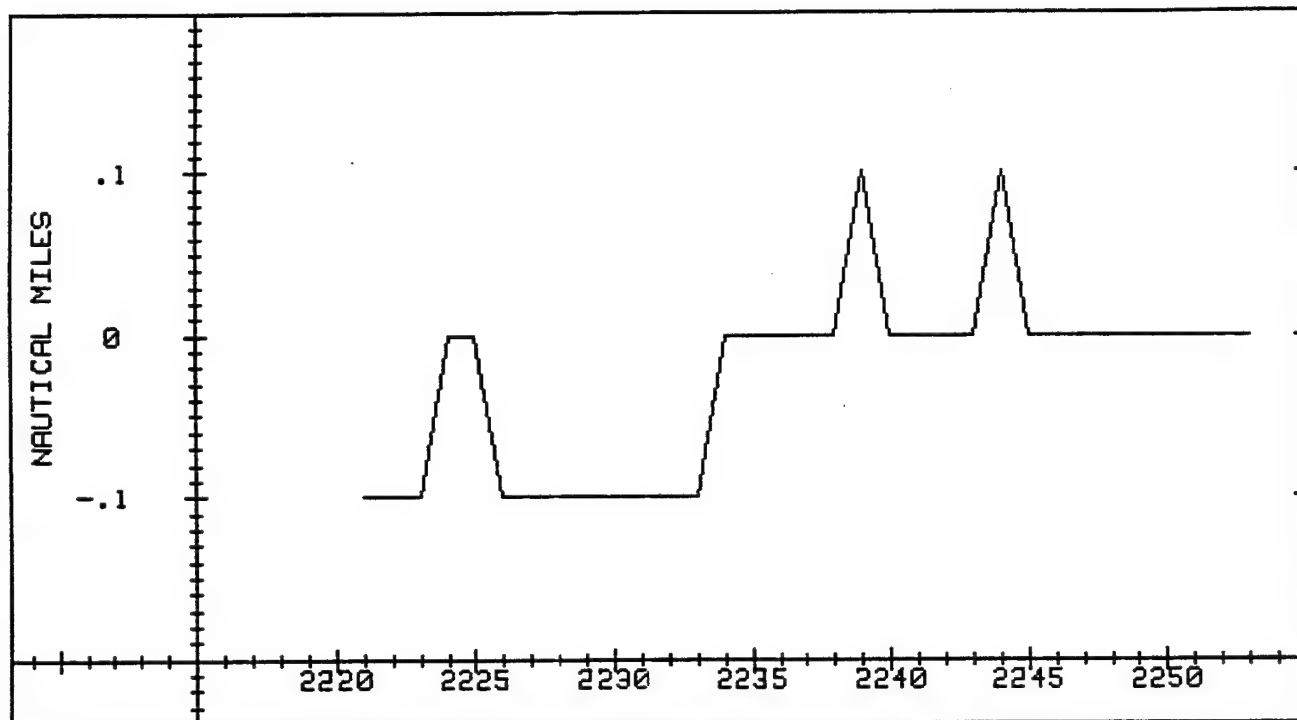


GPS Cross Track Error
MEAN- -.134597 STANDARD DEVIATION- .00425323
DATE: June 26, 1995 PASS 15

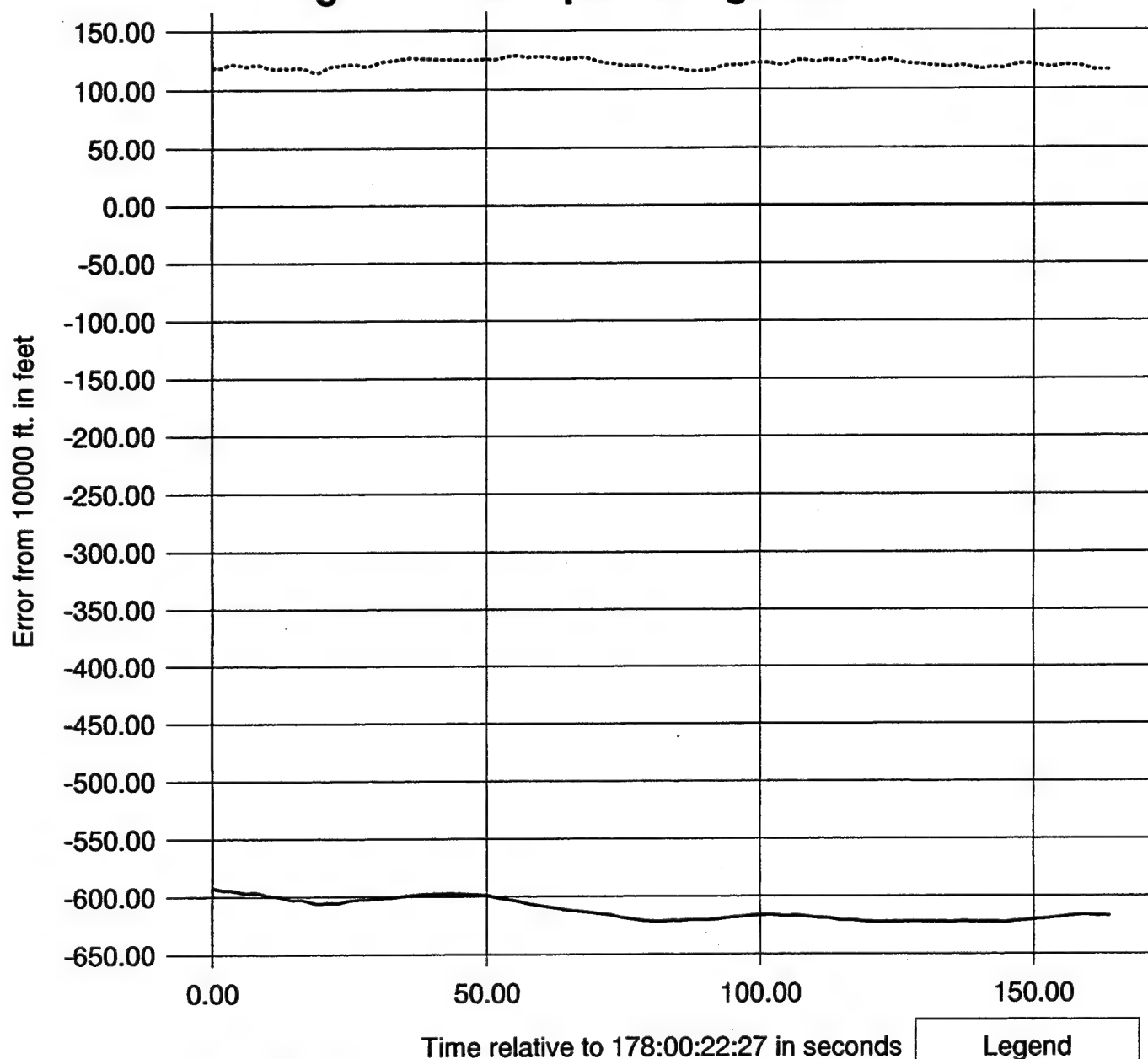


INS CROSS TRACK ERROR

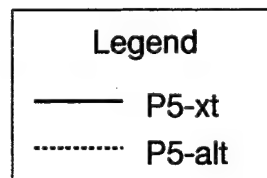
MEAN= -.0272727 STANDARD DEVIATION= .0565296
DATE: June 26, 1995 PASS 15



Portage, ME - June 26, 1995 - Pass 15 - Xtk. and Alt. Errors Higher alt. and port are greater than zero



	Mean	St. Dev.
ALT.	121.74	3.48
XTK.	-612.08	9.57



27 Jun 1995
Tape: E1422

Post-line Data Sheet
Line 29
Mission: PORTAGE MAINE, DAY

Time: 178:00:31:42
Pass 16
Req.# 16

AIRCRAFT & CHANNEL DATA

Altitude		CH 1	CH 2	CH 3	CH 4
Desired:	10000 ft	p-VV	p-VH	p-HV	p-HH
Baro:	9959 ft s.d.=	4 Swath Ctr Ang:	30.0°	30.0°	30.0°
Slt. rng:	18680 ft	Tgt Dep Ang:	30.0°	30.0°	30.0°
Look:	Right	St rng (ft):	17141	17141	17141
Depr Ang:	25.0°	Near Rng Dep:	35.5°	35.5°	35.5°
Des. trk:	156.0°	Far Rng Dep:	17.4°	17.4°	17.4°
Start Sq:	90.0°	Atten (dB):	53.0	54.0	53.0
End Sq:	90.0°	RMS Video (%FS)	27.7	10.2	22.2
					12.8

WAYPOINTS

	Latitude	Longitude
Line up:	N 47:01.32	W 68:37.14
Start:	N 46:50.37	W 68:30.00
End:	N 46:41.24	W 68:24.09
From:	N 61:18.45	W 82:26.03
To:	N 31:12.45	W 60:37.70

Main Target: GP
Mocomp Point:
Lat: N 46:44.73
Long: W 68:30.56
Tgt Trk: 0.0 Tgt Vel: 0.0
Alt: 660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1
Resolution: N/A
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6
TX Chirp Filename: CTL1U2B

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts)
Ave Gndspd: Real -> 250.1 kts
Mocomp Off for Chnl 1, 2, 3, 4
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF
RX Chirp Filename: CRL1N0A

Ave Ref Vel -> -0.0 fps (s.d.= 1.4)
Ave Fil Vel -> 1.0 fps (s.d.= 1.3)

NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation: 0.0°	Starting: 8038 ft	(2)
L: -70.0	Azimuth: 0.0°	Ending: 9267 ft	(2)
C: -70.0	Pitch: 0.0°		
P: 47.1			

Vel Bias	CAL Atten
X: 1035.0	X: 63.8 dB
Y: -433.0	L: 63.8 dB
Z: 6697.0	C: 63.8 dB

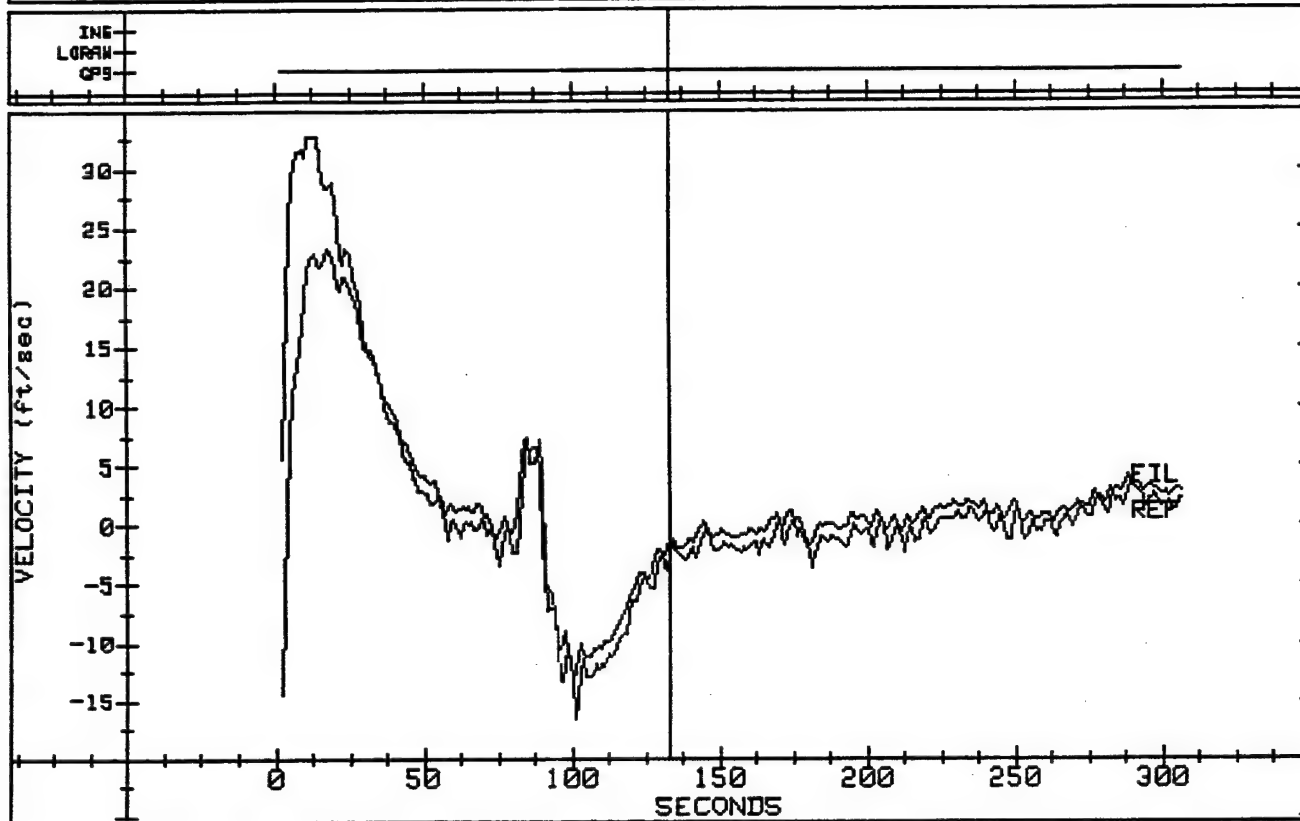
LINE Map Time (UCT)
Start: 00:31:42
End: 00:34:24

Mocomp Counters

Start: 959726 000EA4EEh
End: 986894 000F0F0Eh

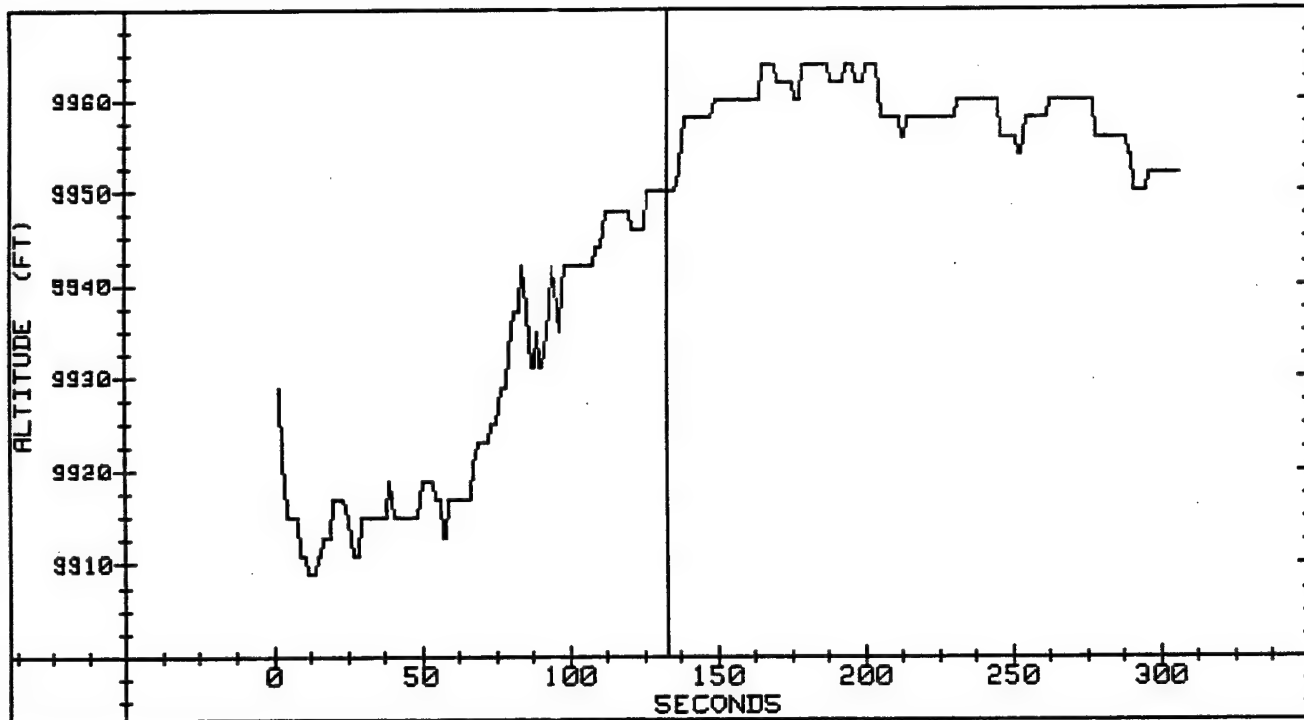
CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 170 TIME 0:29 PASS 16



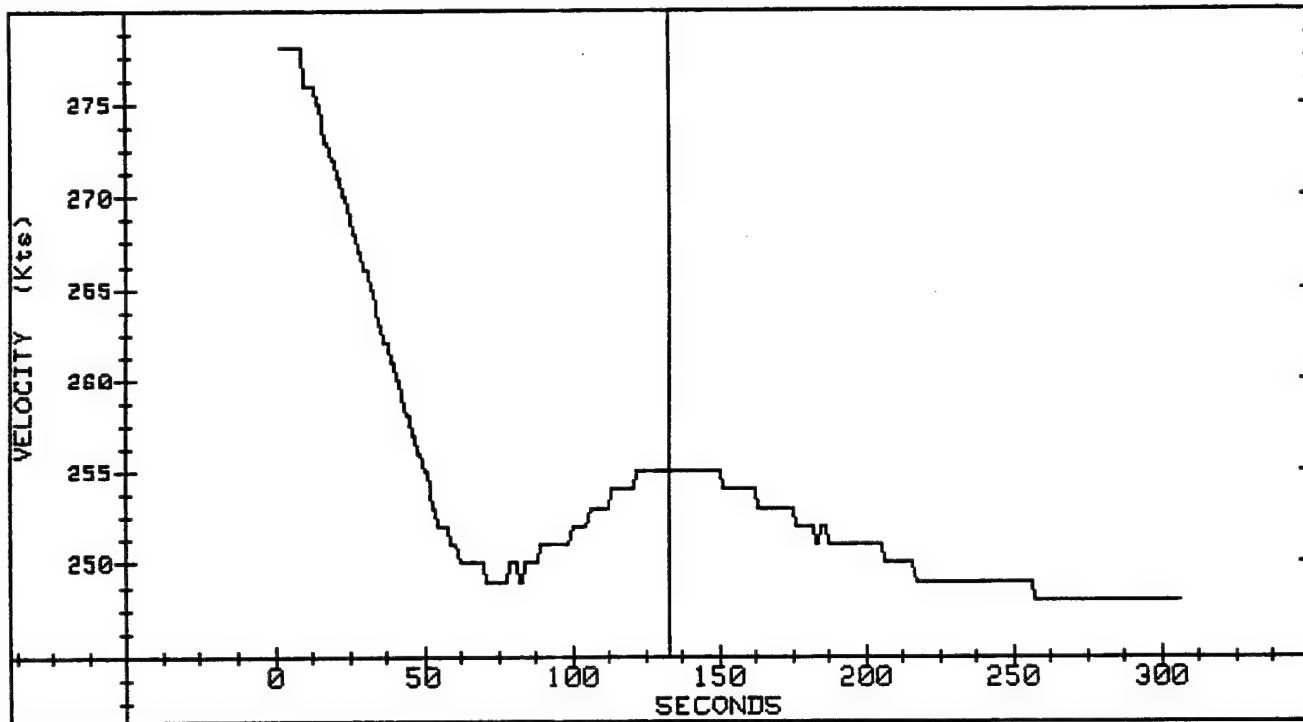
BARO ALTITUDE

DAY 178 TIME 0:29 PASS 16 m= 9959, sd= 3.50096



INS GROUND SPEED

DRY 178 TIME 0:29 PASS 16 m= 250.1, sd= 2.18513



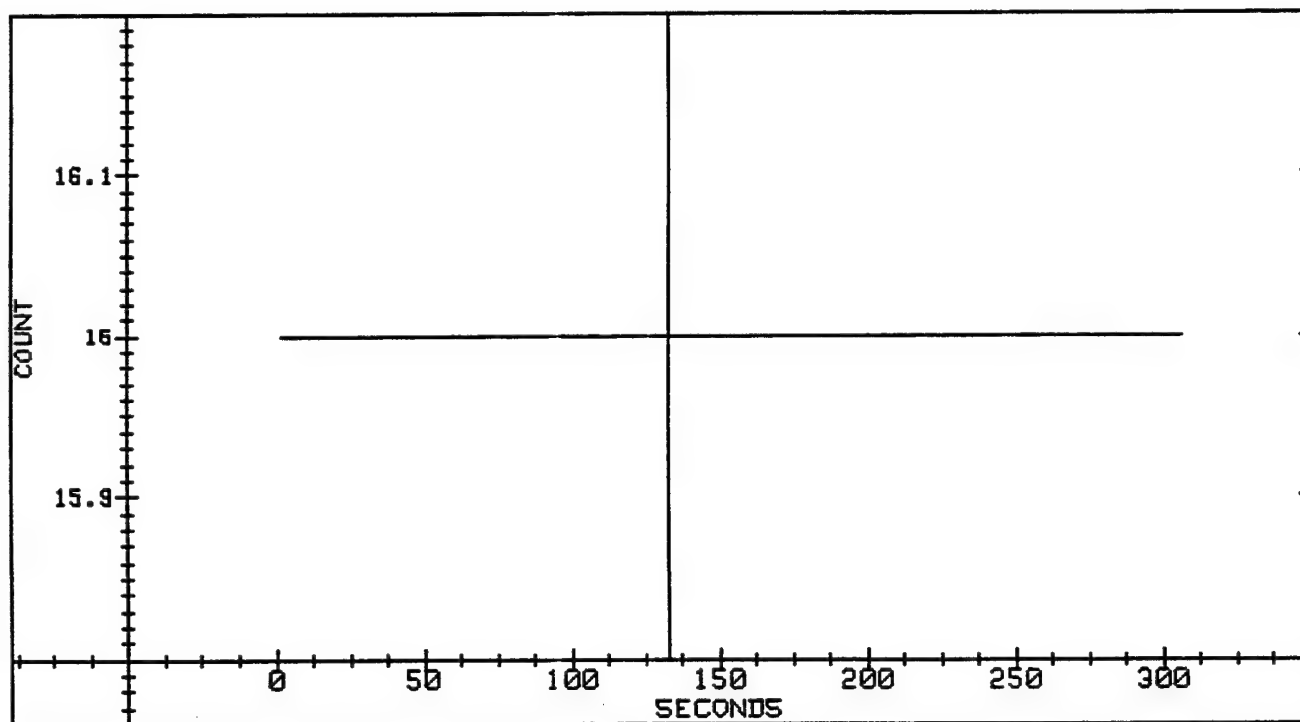
PASS NUMBER

DAY 170

TIME 0:29

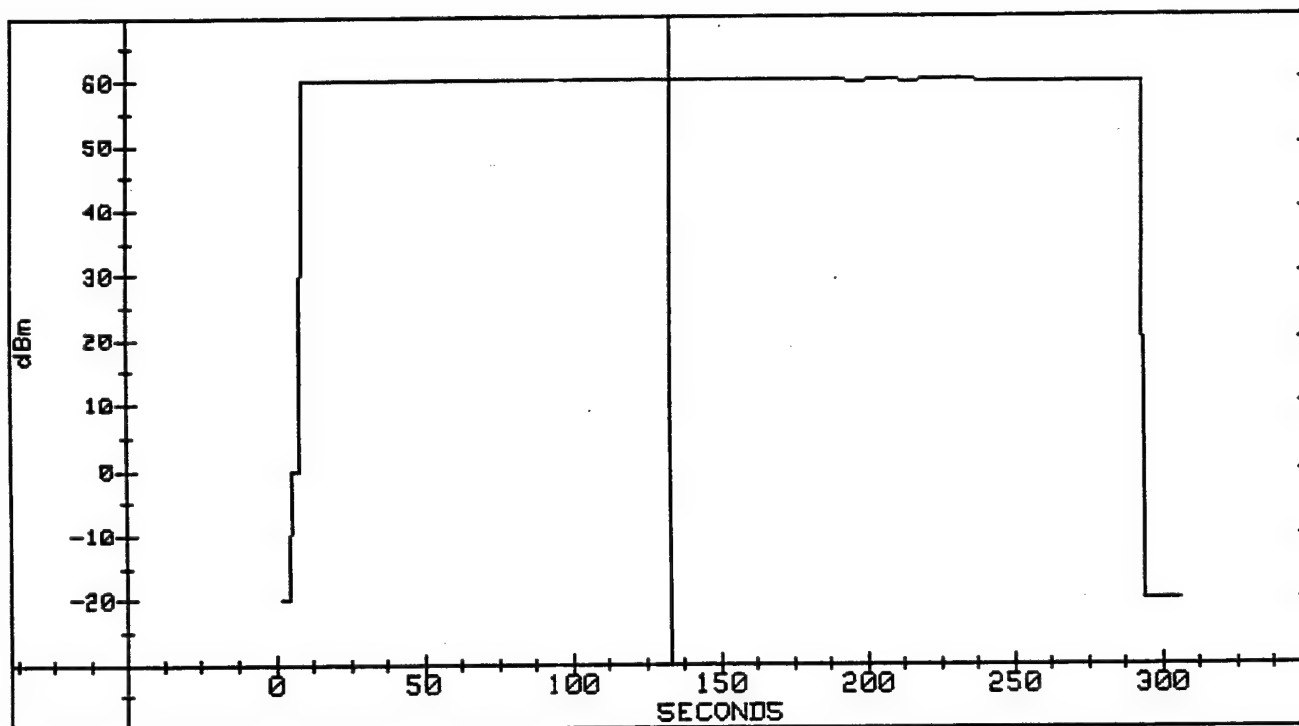
PASS 16

m= 16, sd= 0



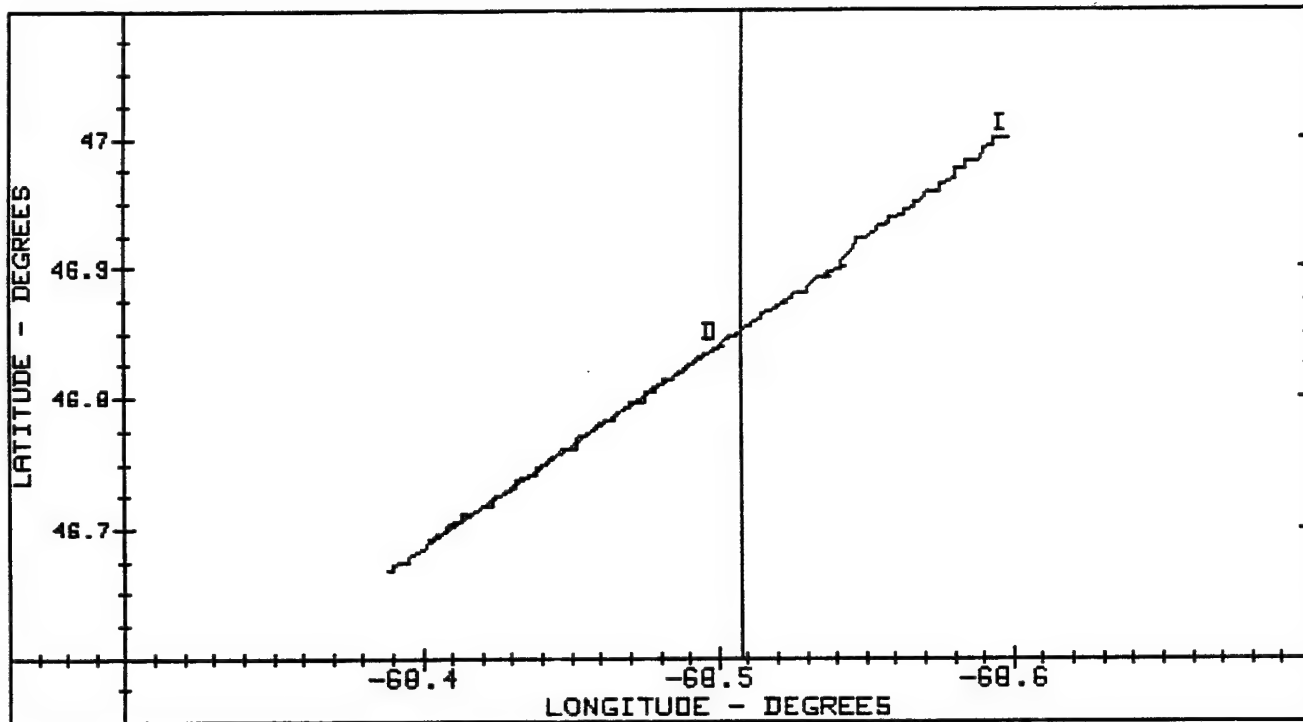
P Band Power

DRY 178 TIME 0:29 PRSS 16 m= 53.48, sd= 21.6332



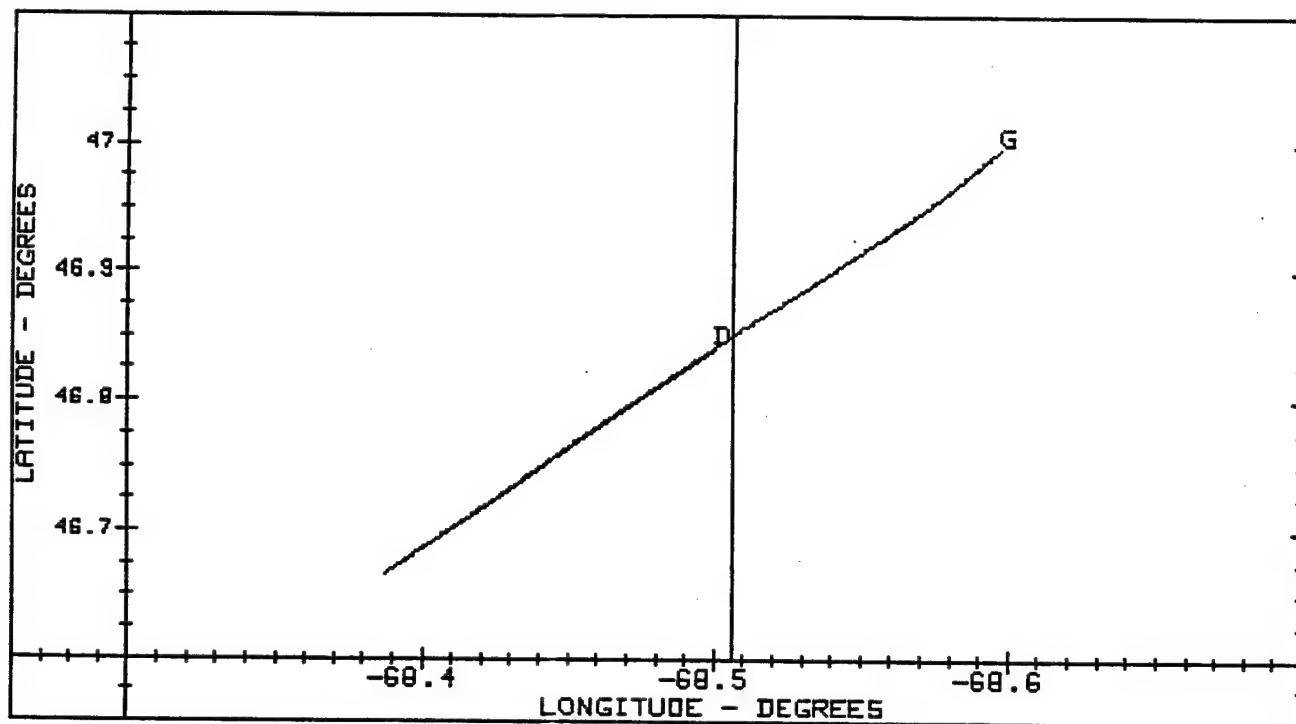
INS AIRCRAFT POSITION

DAY 170 TIME 0:29 PASS 16



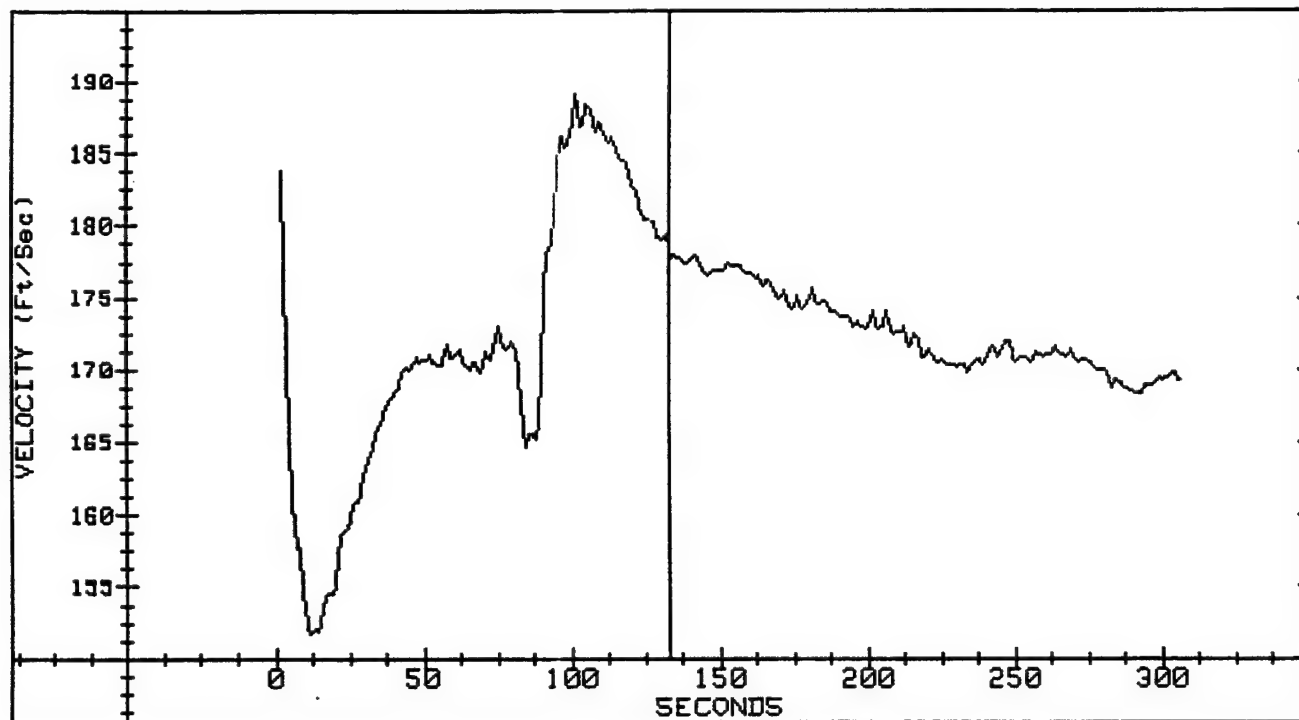
GPS AIRCRAFT POSITION

DAY 178 TIME 0:29 PASS 16



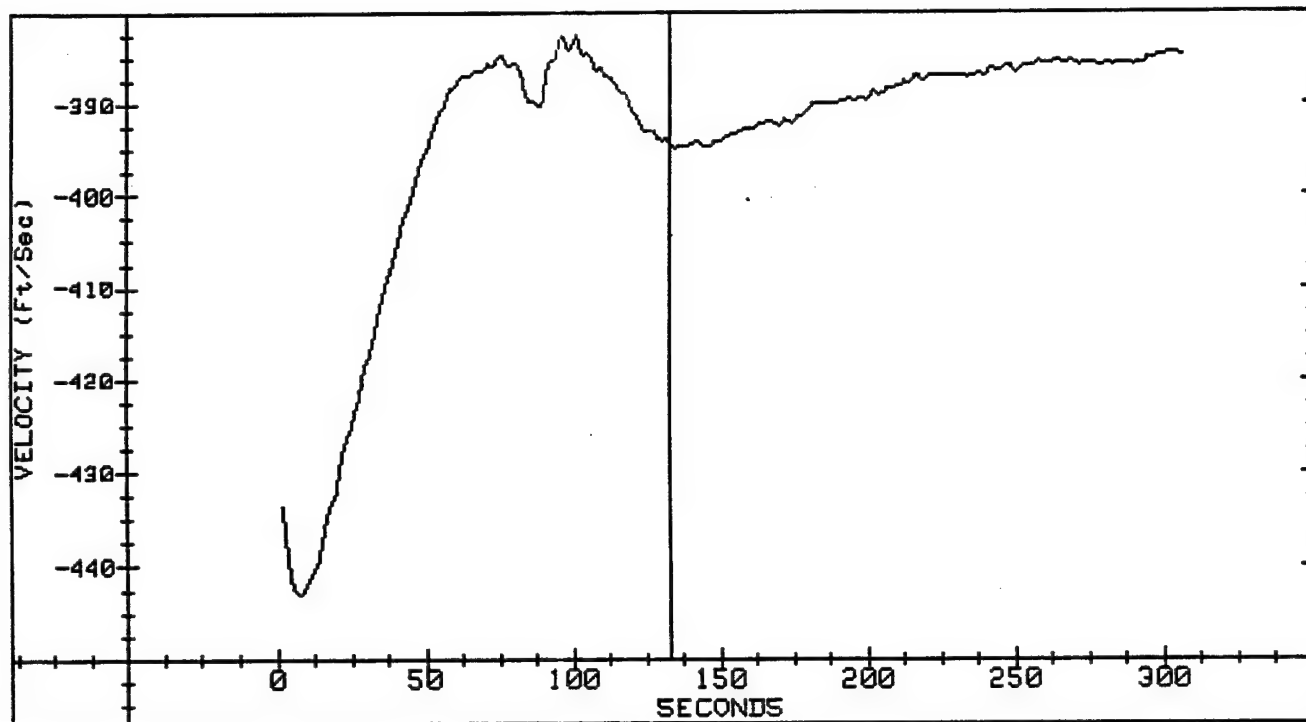
GPS Vc

DRY 170 TIME 0:29 PASS 16 m= 172.3, sd= 2.56B21



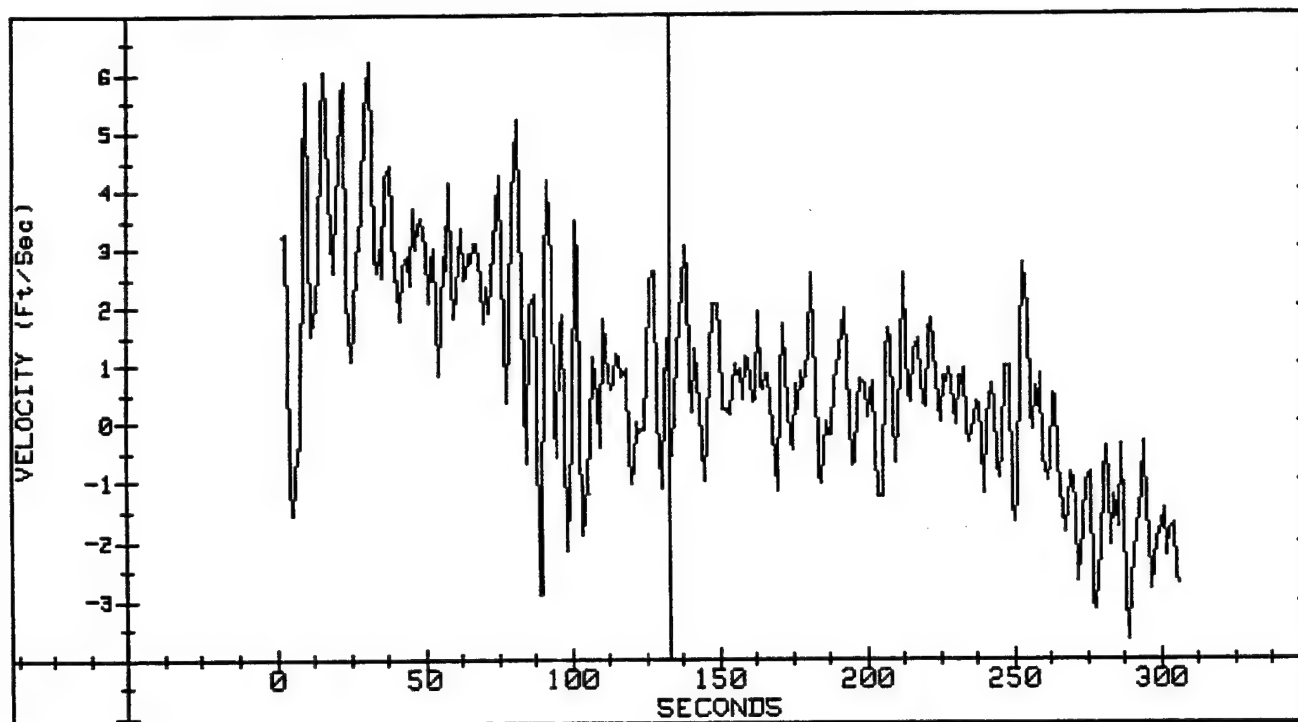
GPS Vn

DAY 170 TIME 0:29 PASS 16 m= -300.2, sd= 2.91298



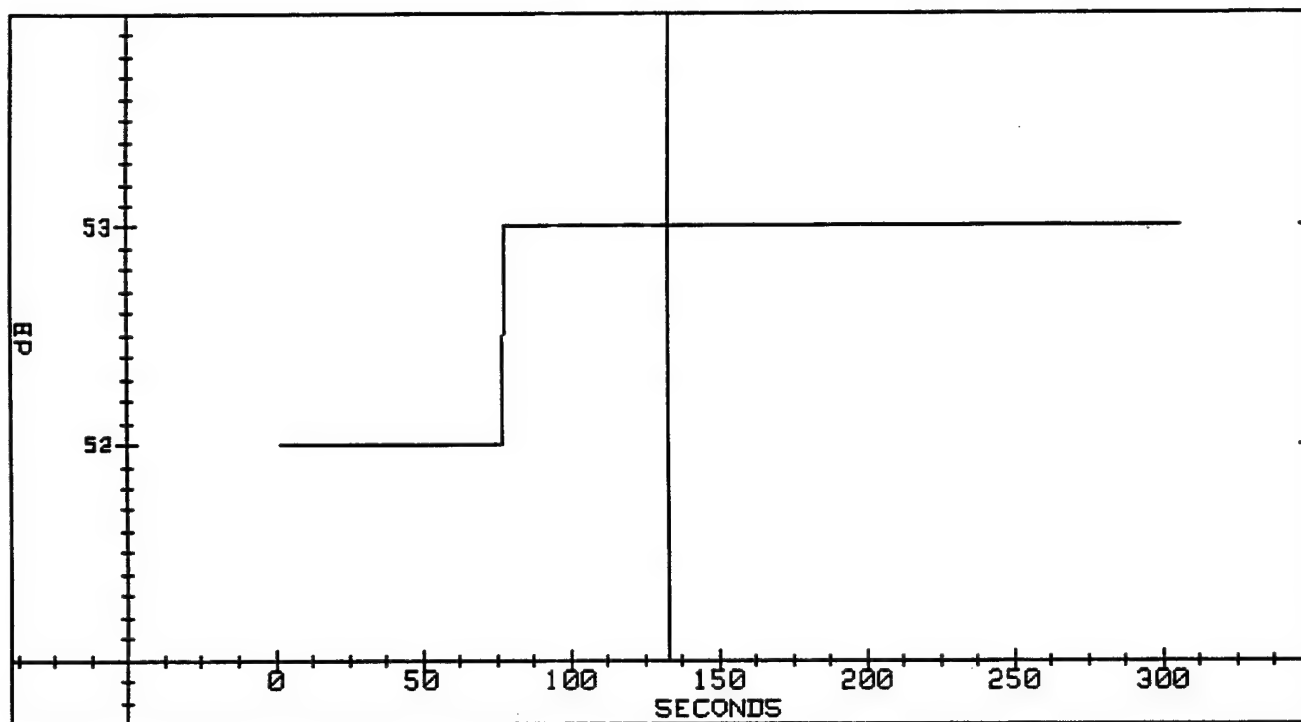
GPS Vv

DAY 178 TIME 0:29 PASS 16 m= -.1123, sd= 1.2756



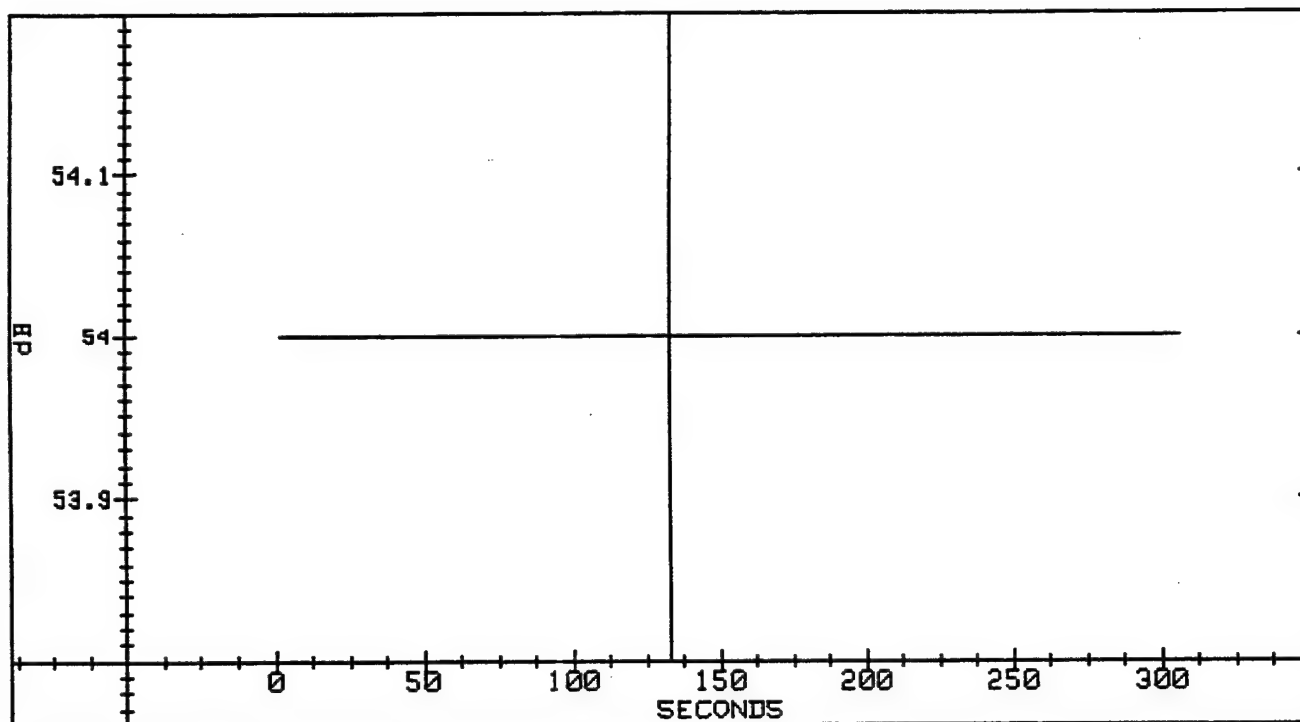
Ch1 RES Attenuation

DAY 170 TIME 0:29 PASS 16 m= 53, sd= 0



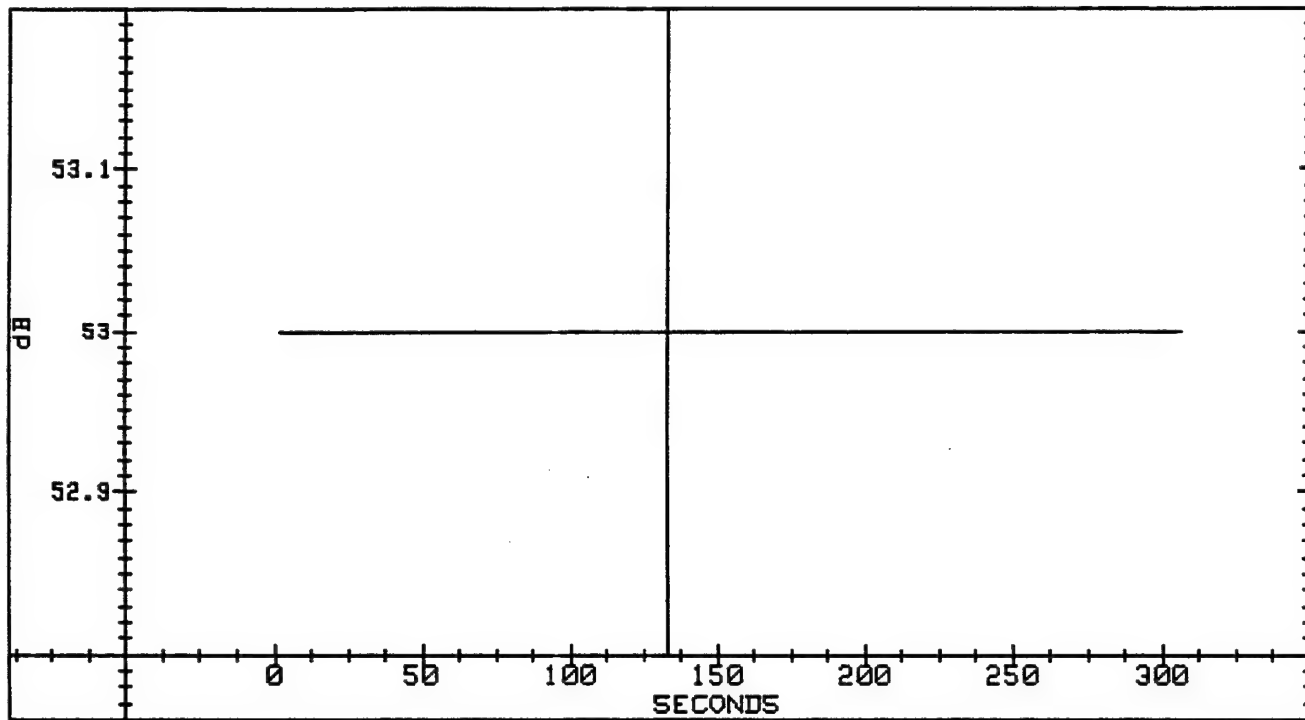
Ch2 RES Attenuation

DAY 170 TIME 0:29 PASS 16 m= 54, sd= 0



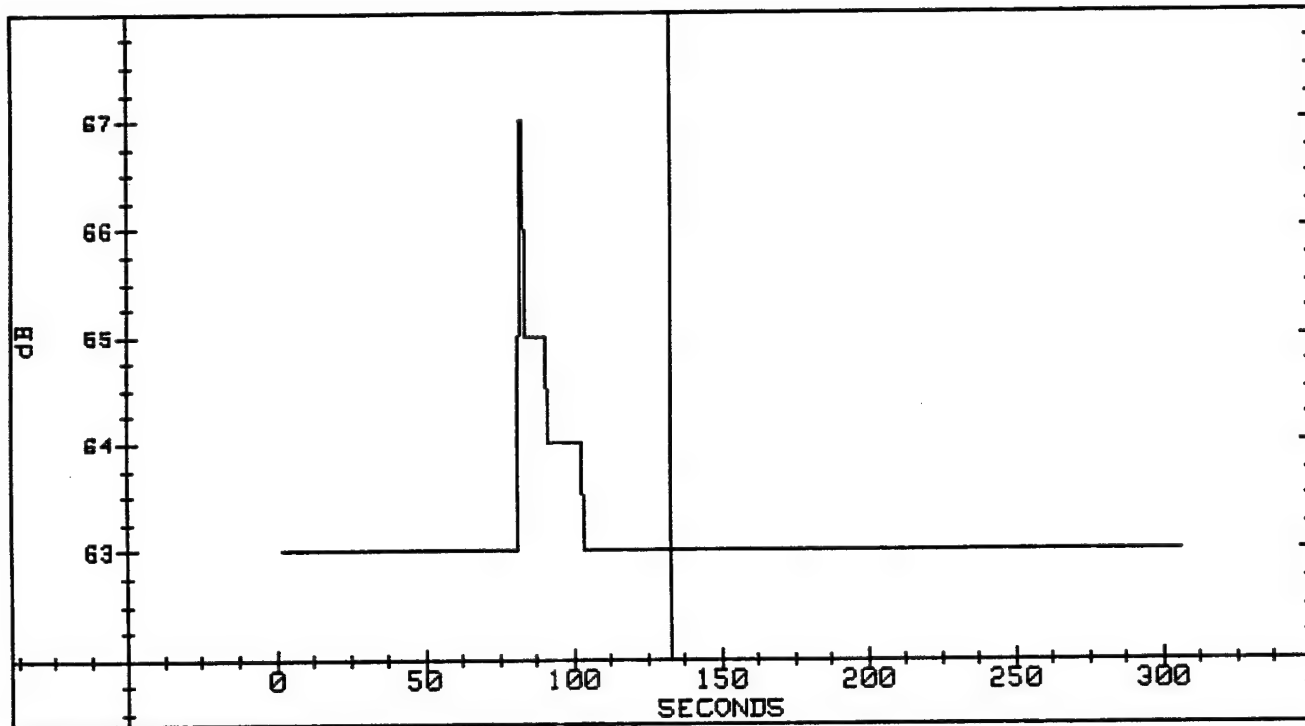
Ch3 RES Attenuation

DAY 178 TIME 0:29 PASS 16 m= 53, sd= 0



Ch4 RES Attenuation

DAY 170 TIME 0:29 PASS 16 m= 63, sd= 0



GPS ALTITUDE

MEAN= 10552.9 STANDARD DEVIATION= 19.7529
DATE: June 26, 1995 PASS 16

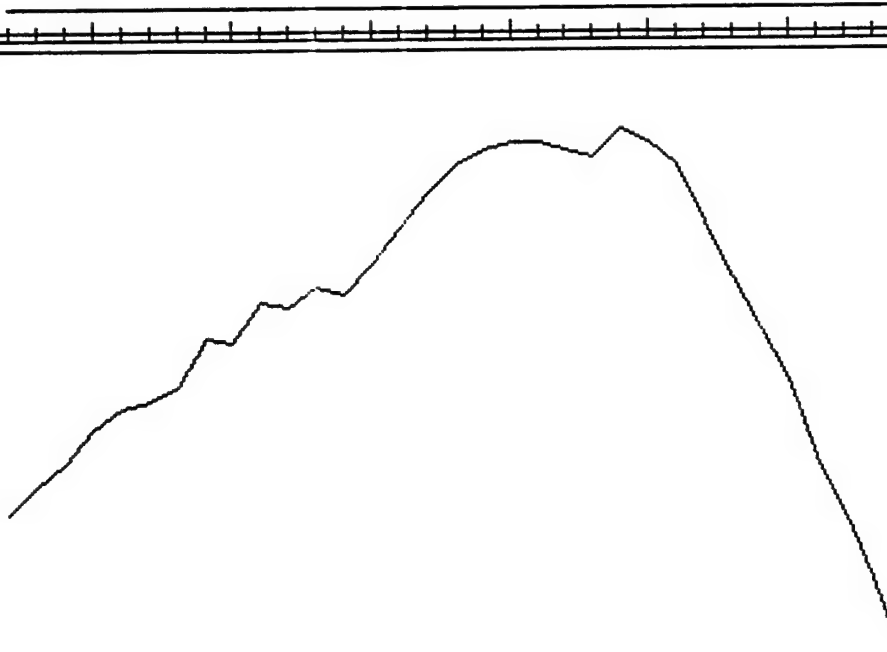
OFF
ON
ERR

10580
10570
10560
10550
10540
10530
10520
10510

FEET

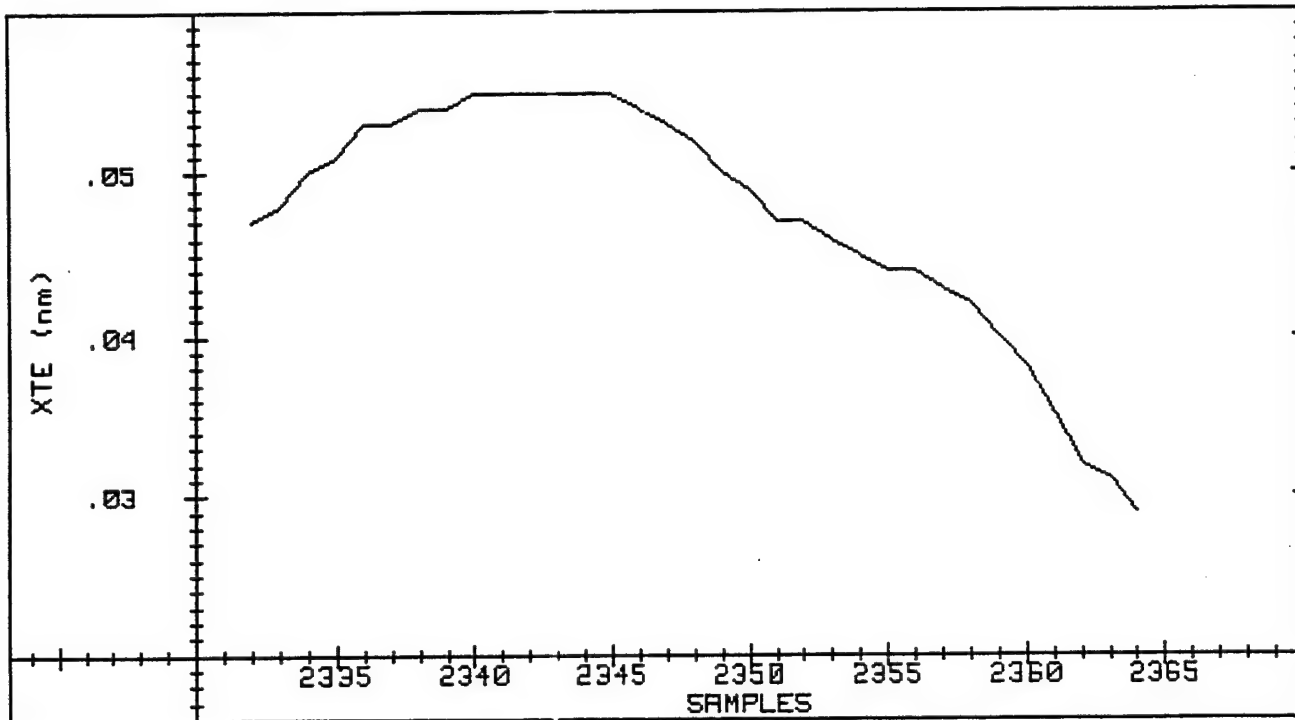
2335 2340 2345 2350 2355 2360 2365

SAMPLES



GPS Cross Track Error

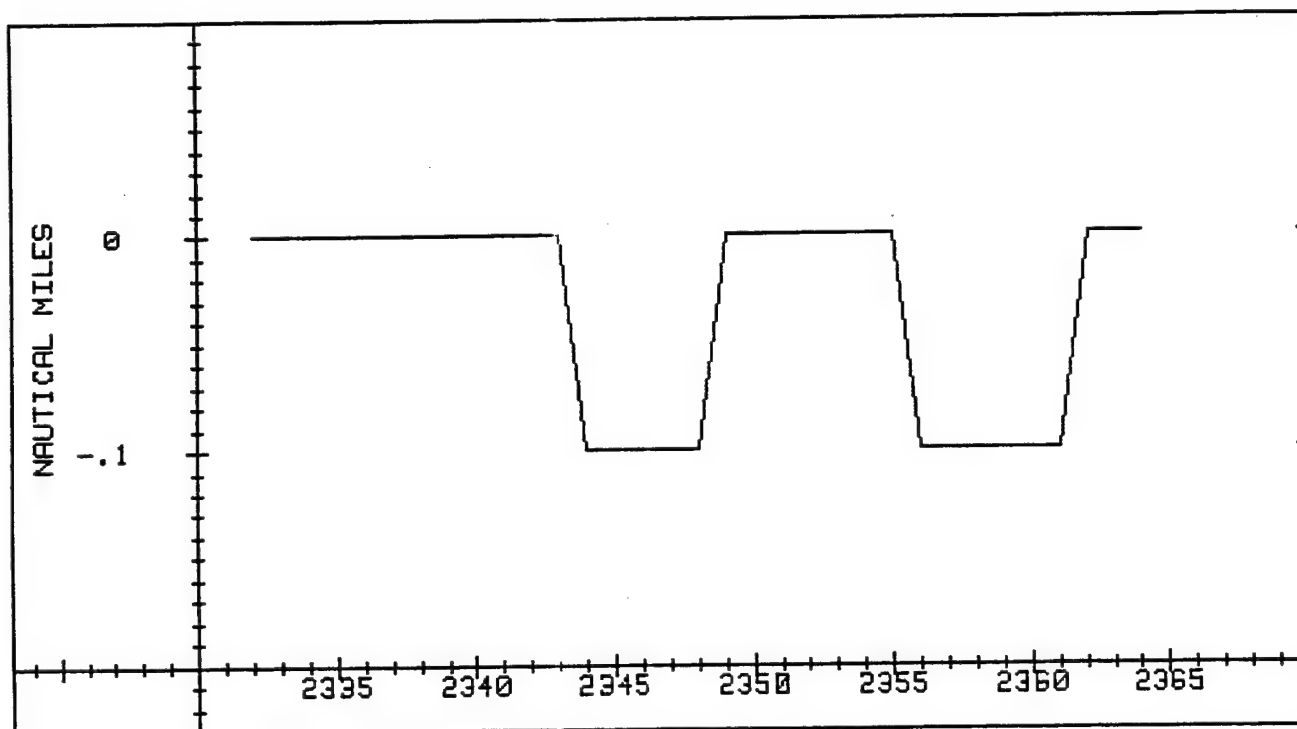
MEAN= .047303 STANDARD DEVIATION= .00747312
DATE: June 26, 1995 PASS 16



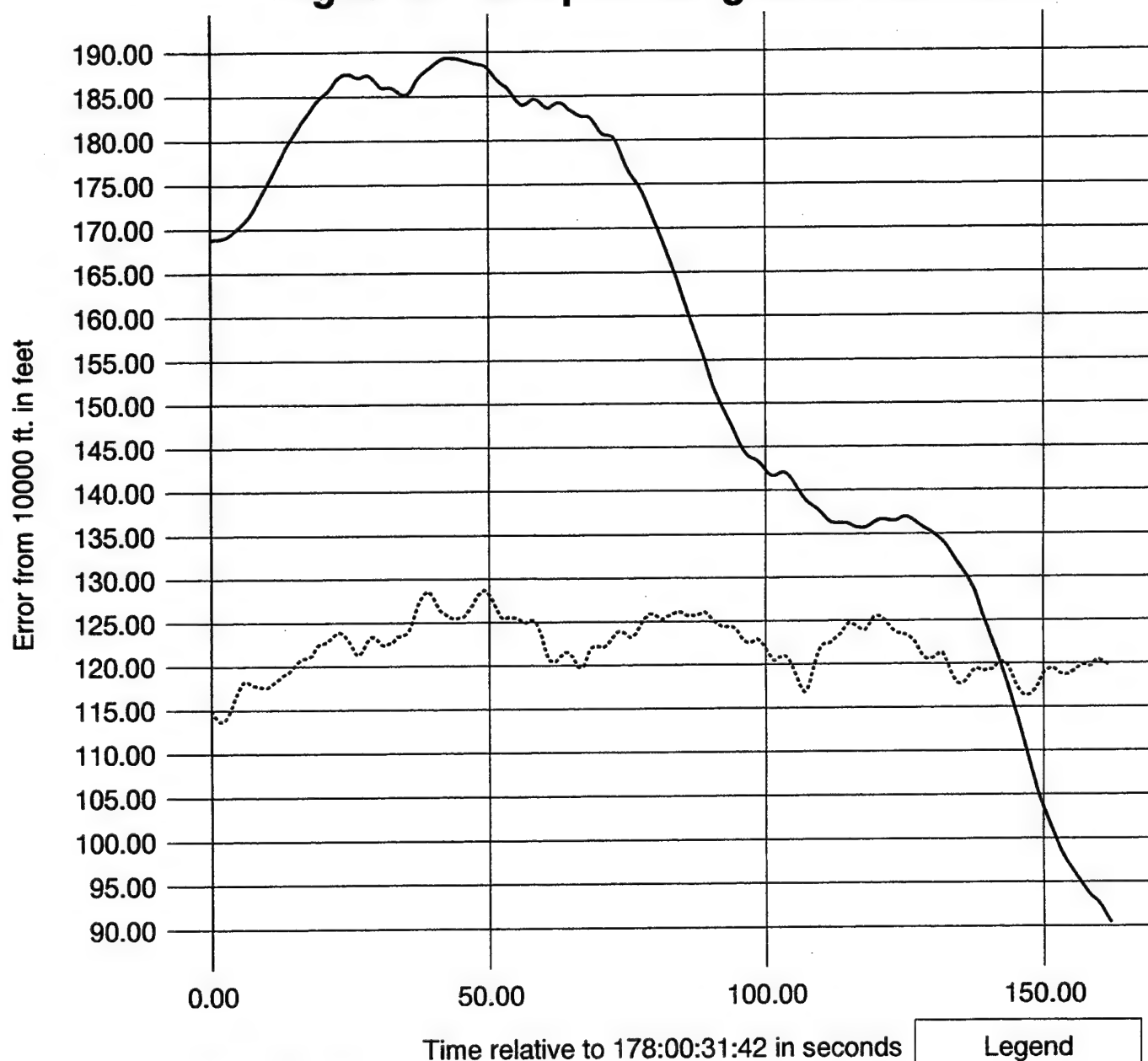
INS CROSS TRACK ERROR

MEAN= -.0333333 STANDARD DEVIATION= .0471405

DATE: June 26, 1995 PASS 16



Portage, ME - June 26, 1995 - Pass 16 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



	Mean	St. Dev.
ALT.	122.13	3.18
XTK.	156.77	29.26

Legend	
—	P5-xt
.....	P5-alt

27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 31
Mission: PORTAGE MAINE, DAY

Time: 178:00:44:17
Pass 17
Req.# 17

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	10000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	9972 ft s.d.=	3 Swath Ctr Ang:	28.0°	28.0°	28.0°	28.0°
Slt. rng:	19592 ft	Tgt Dep Ang:	28.0°	28.0°	28.0°	28.0°
Look:	Right	St rng (ft):	16339	16339	16339	16339
Depr Ang:	25.0°	Near Rng Dep:	37.6°	37.6°	37.6°	37.6°
Des. trk:	276.0°	Far Rng Dep:	17.9°	17.9°	17.9°	17.9°
Start Sq:	90.0°	Atten (dB):	54.0	54.0	54.0	63.0
End Sq:	90.0°	RMS Video (%FS)	32.2	14.4	22.3	19.5

WAYPOINTS

	Latitude	Longitude
Line_up:	N 46:39.64	W 68:04.86
Start:	N 46:40.93	W 68:22.18
End:	N 46:41.98	W 68:36.64
From:	N 42:35.36	W 45:46.22
To:	N 45:52.64	W 92:35.19

Main Target: CALCS
Mocomp Point:
Lat: N 46:44.29
Long: W 68:28.98
Tgt Trk: 0.0 Tgt Vel: 1.0
Alt: 802.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1
Resolution: N/A
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6
TX Chirp Filename: CTL2U1A

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts) -
Ave Gndspd: Real -> 250.5 kts
Mocomp Off for Chnl 1, 2, 3, 4
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF
RX Chirp Filename: CRL2N0A

Ave Ref Vel -> -.9 fps (s.d.= 1.3)
Ave Fil Vel -> -2.2 fps (s.d.= 1.0)

NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation: 0.0°		
L: -70.0	Azimuth: 0.0°	Starting: 200 ft	(1)
C: -70.0	Pitch: 0.0°	Ending: 1439 ft	(1)
P: 44.7			

Vel Bias	CAL Atten
X: 1035.0	X: 63.8 dB
Y: -433.0	L: 63.8 dB
Z: 6697.0	C: 63.8 dB

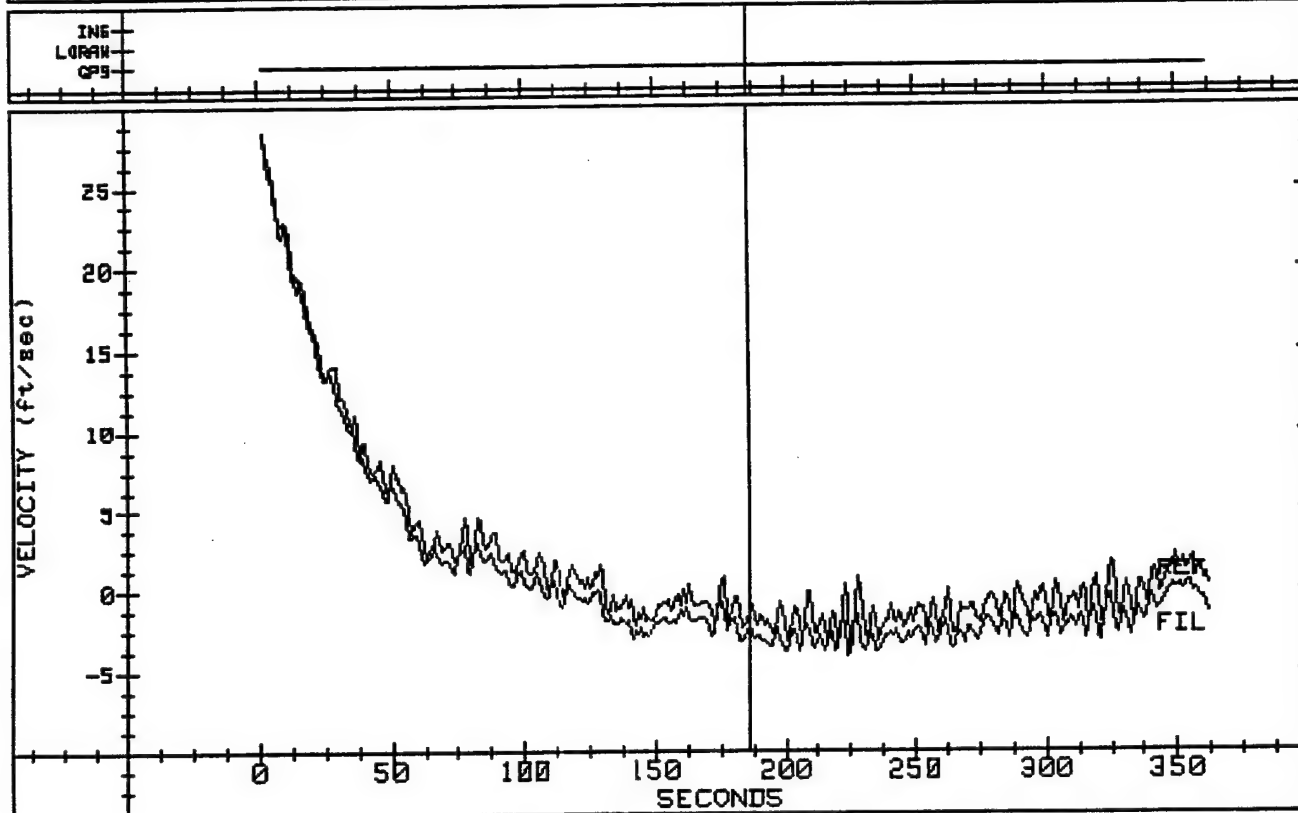
LINE Map Time (UCT)
Start: 00:44:17
End: 00:46:58

Mocomp Counters

Start: 1020406 000F91F6h
End: 1047407 000FFB6Fh

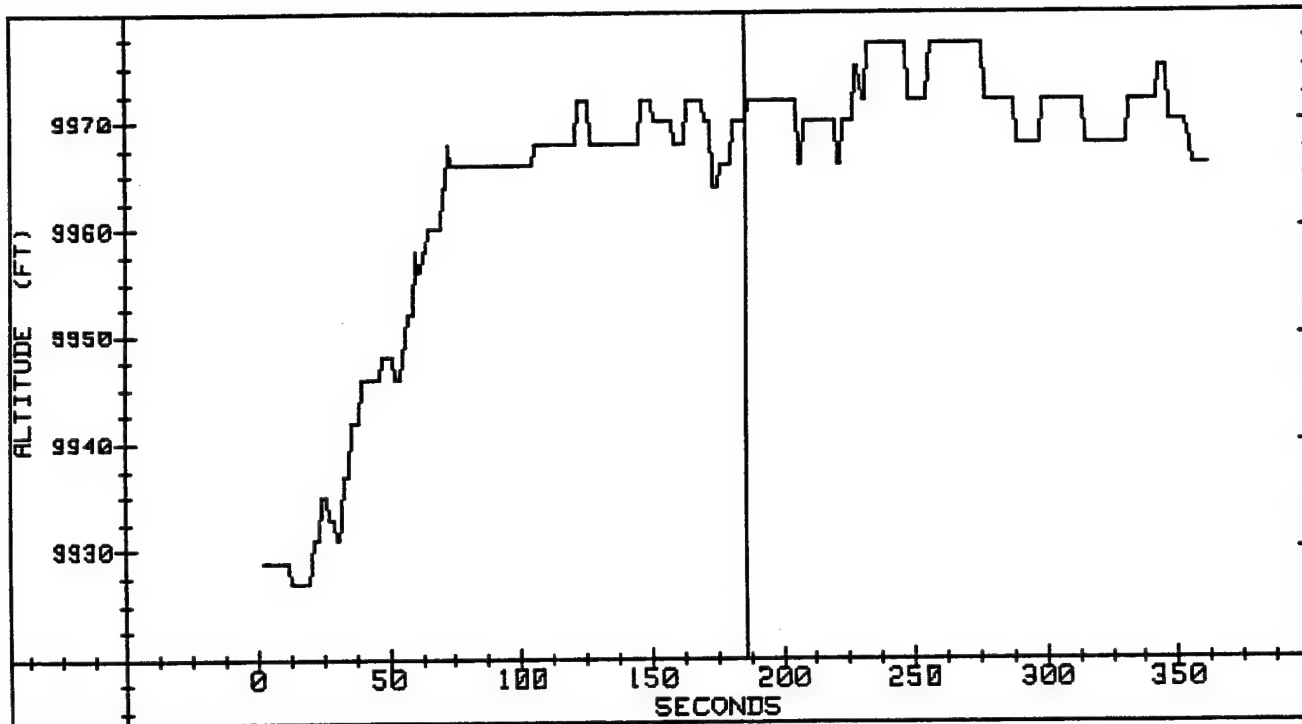
CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 178 TIME 0:40 PASS 17



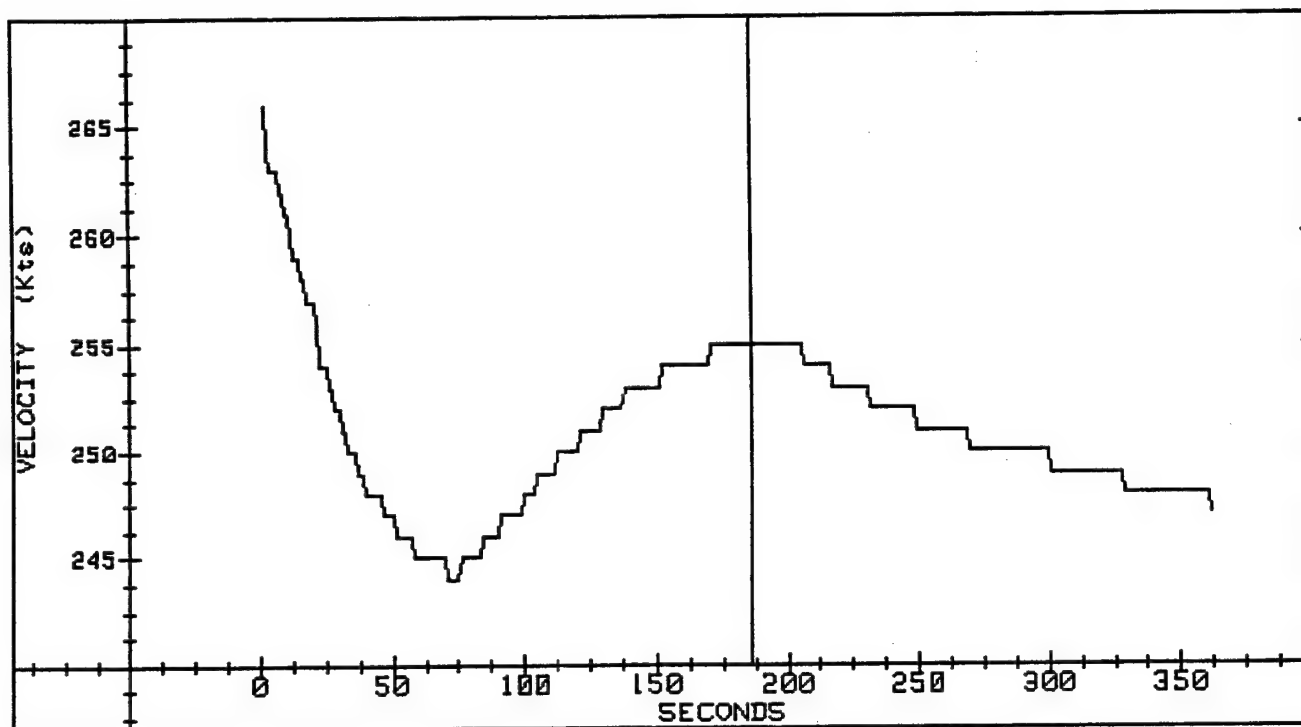
BARO ALTITUDE

DAY 178 TIME 0:40 PASS 17 m= 9972, sd= 3.40005



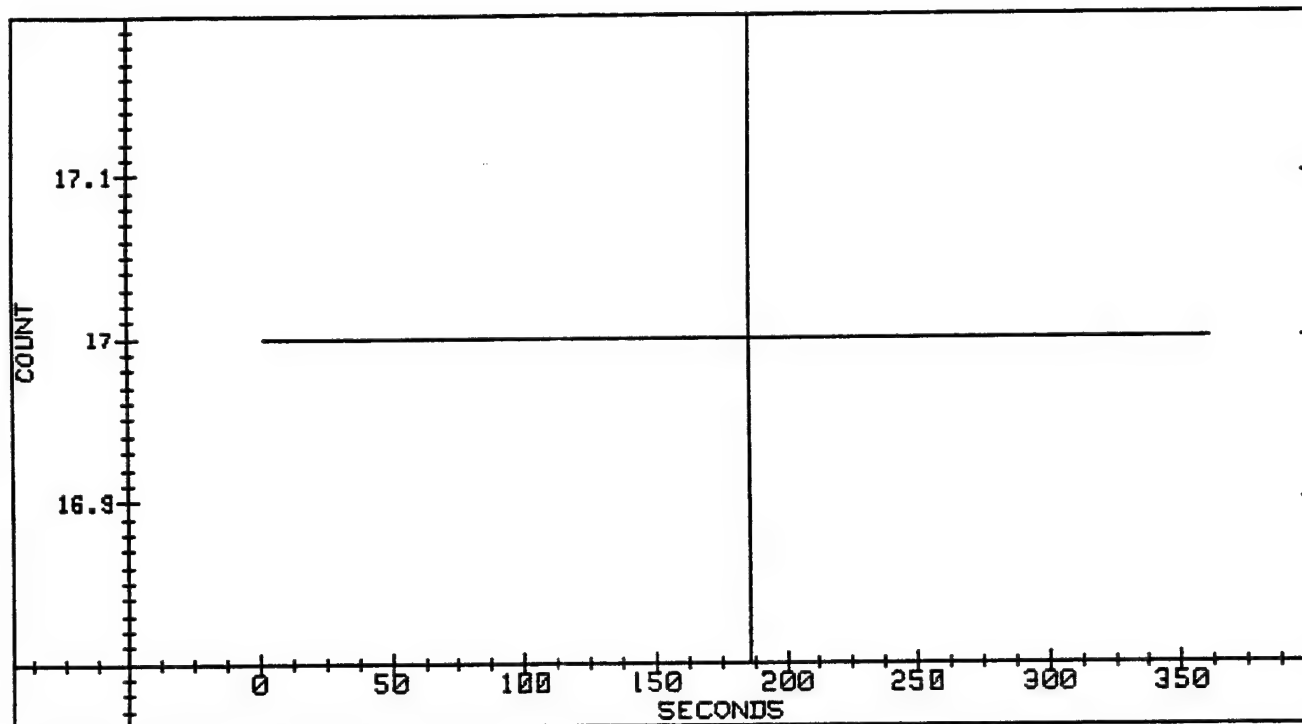
INS GROUND SPEED

DRY 178 TIME 0:40 PASS 17 m= 250.5, sd= 2.04619



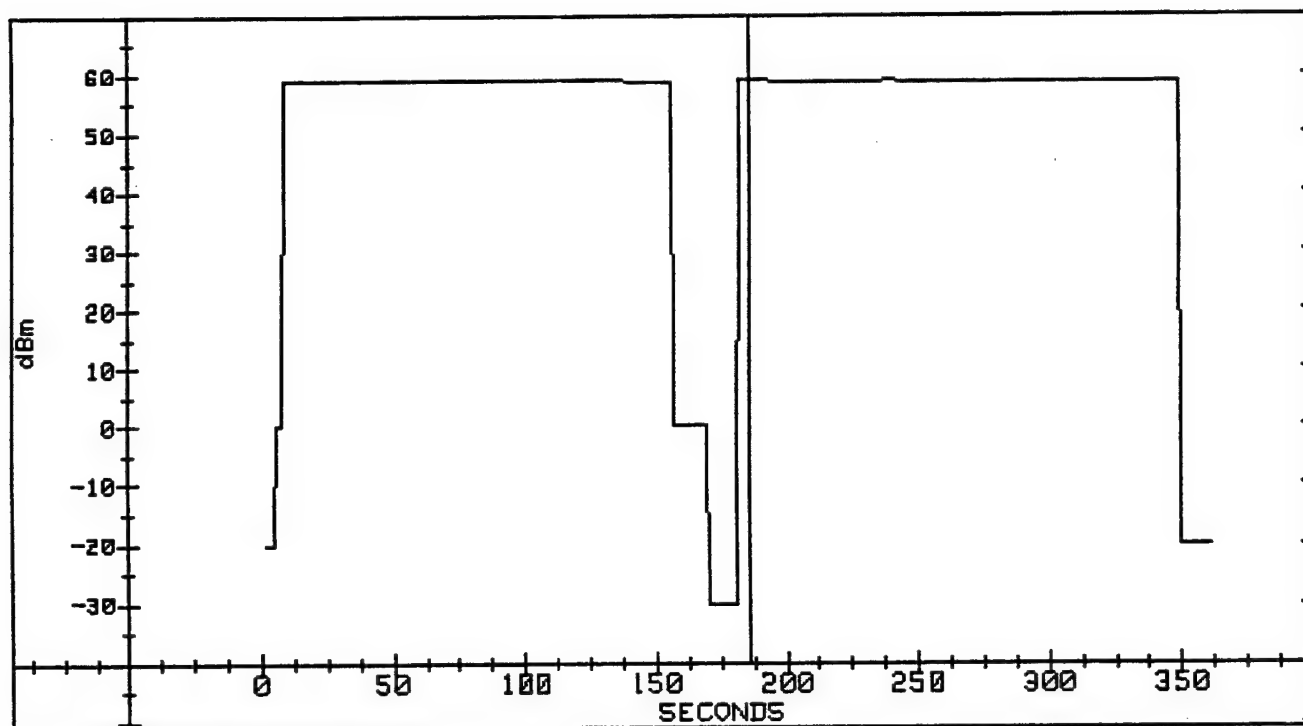
PASS NUMBER

DAY 170 TIME 0:40 PASS 17 m= 17. sd= 0



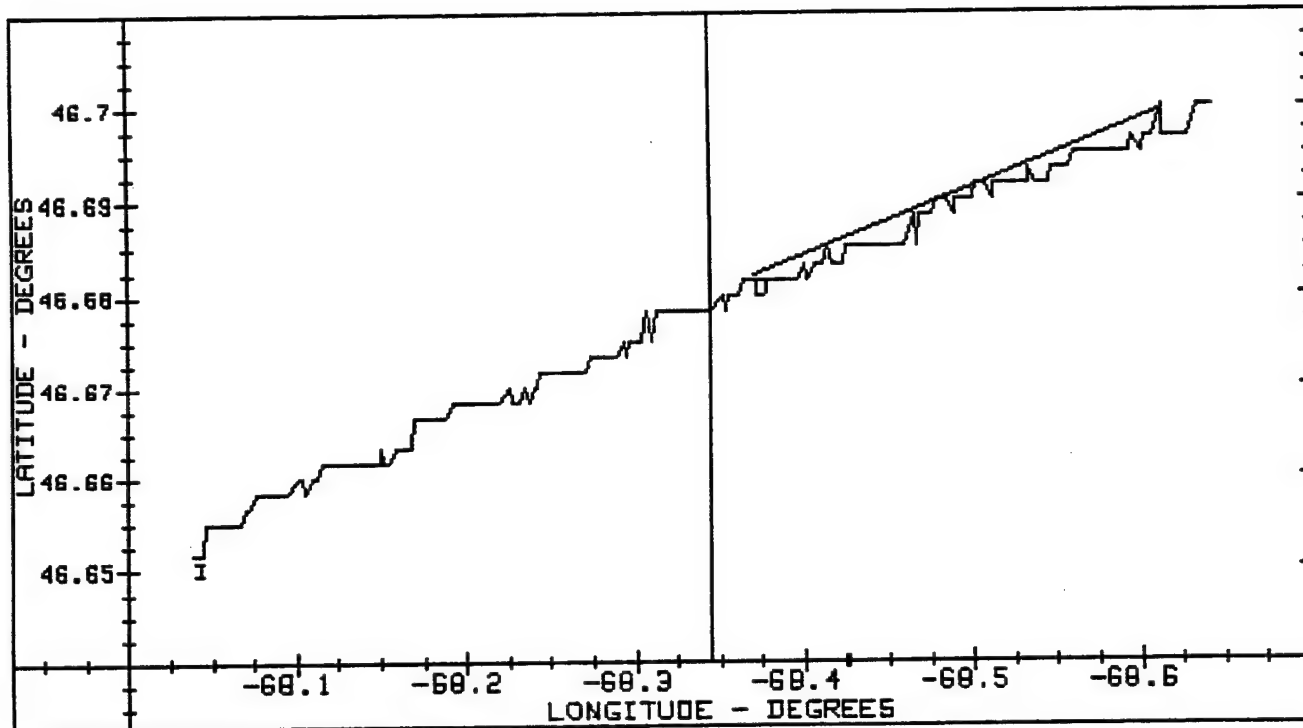
P Band Power

DRY 178 TIME 0:40 PASS 17 m= 52.97, sd= 20.6379



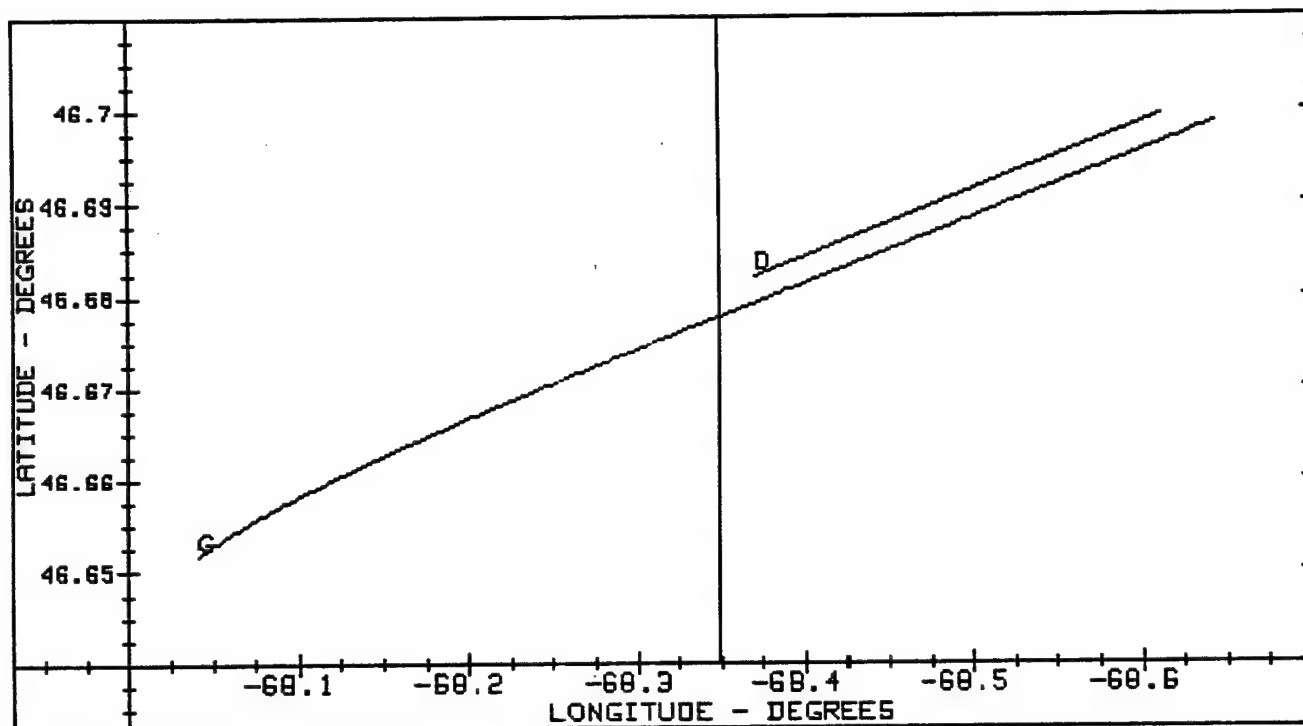
INS AIRCRAFT POSITION

DAY 178 TIME 0:40 PASS 17



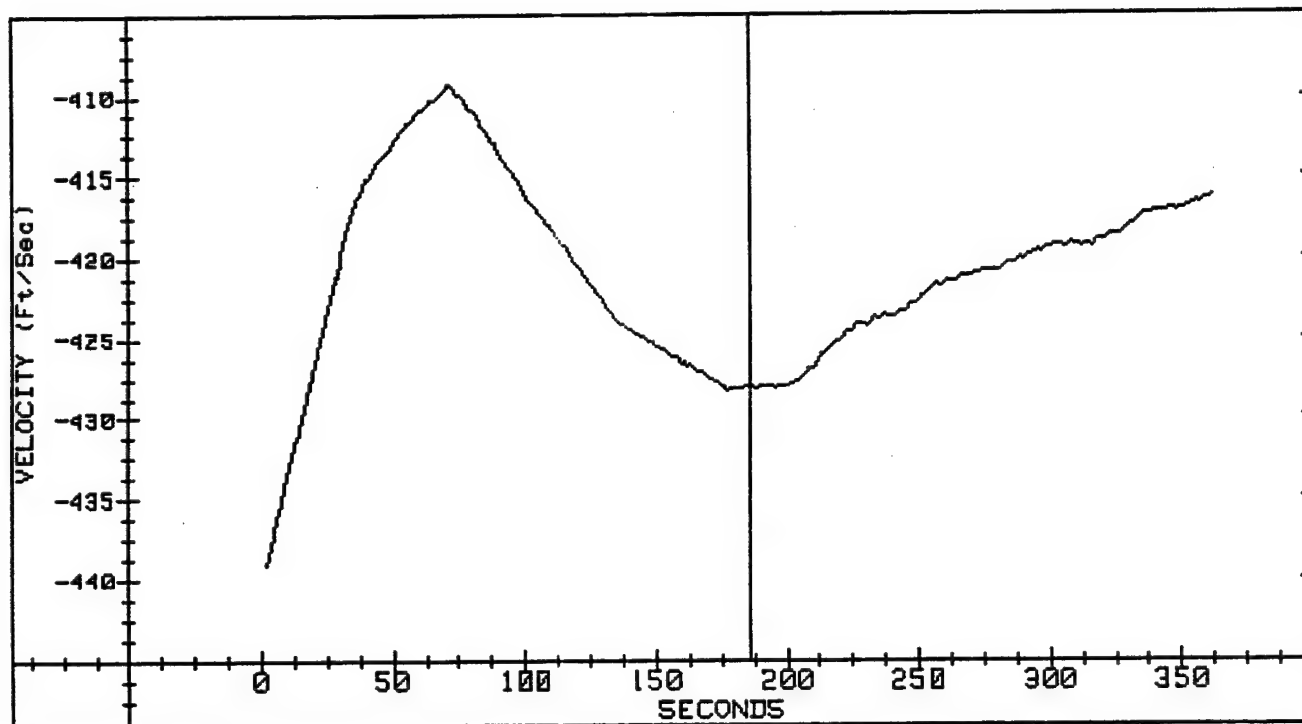
GPS AIRCRAFT POSITION

DAY 170 TIME 0:40 PASS 17



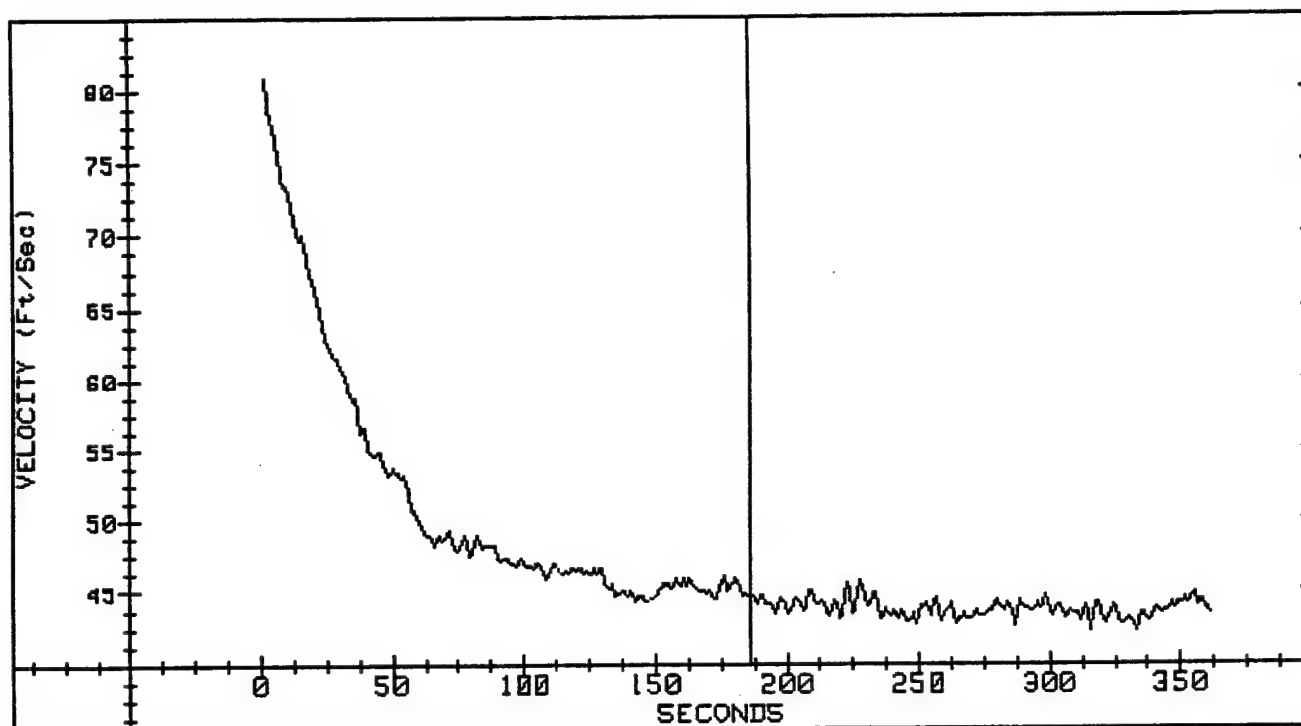
GPS V_e

DRY 170 TIME 0:40 PASS 17 m= -421, sd= 3.13205



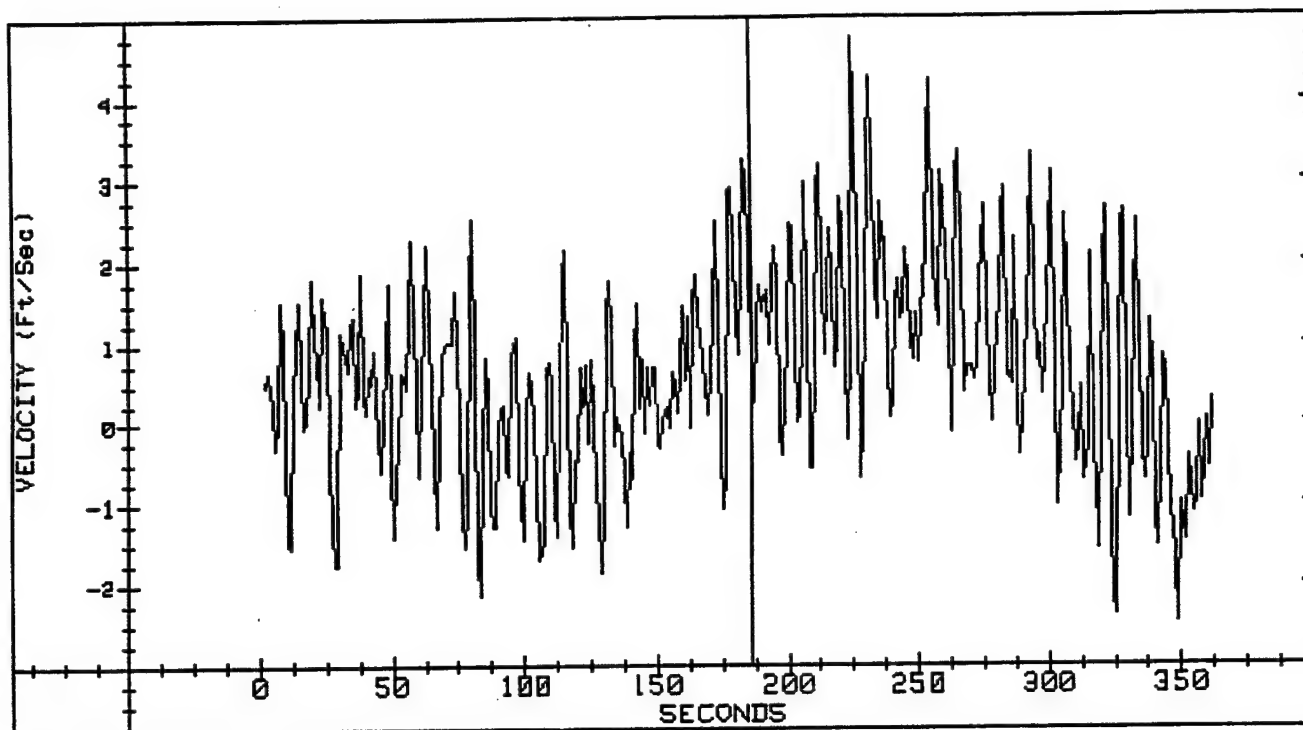
GPS Vn

DRY 178 TIME 0:40 PRSS 17 m= 43.77, sd= .606984



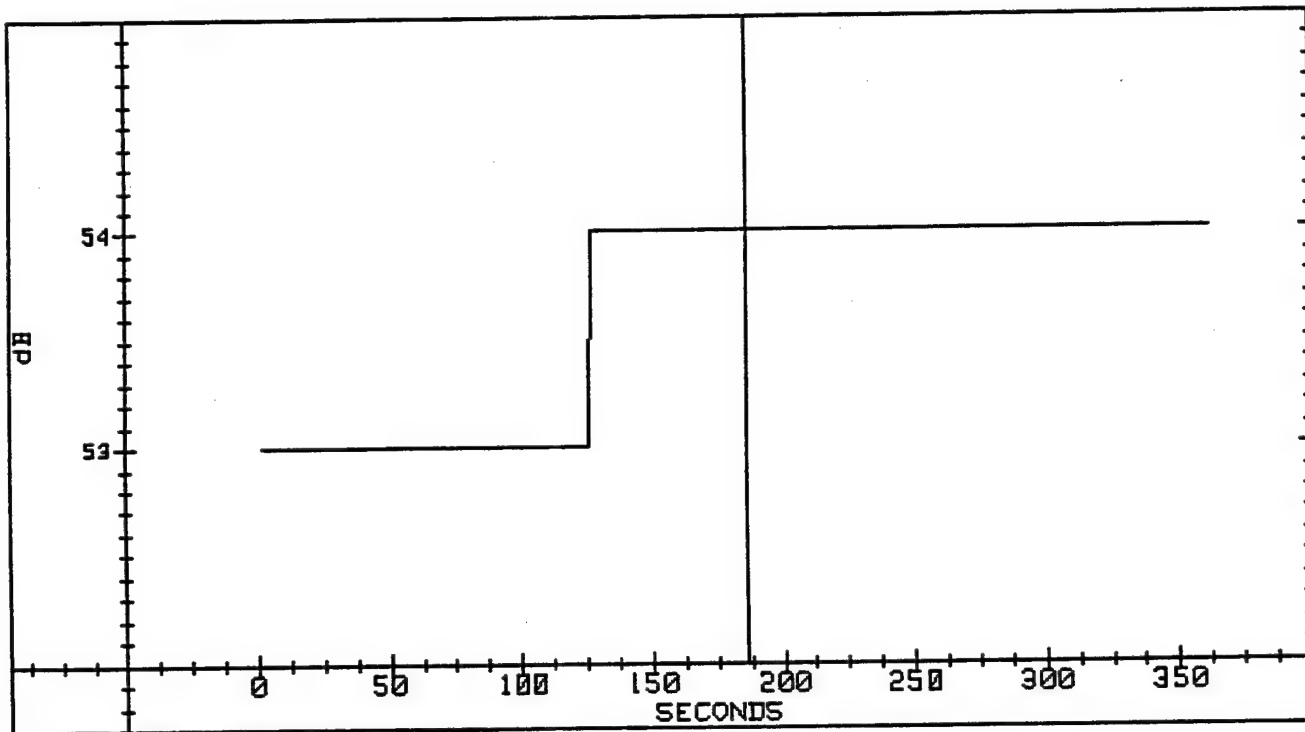
GPS Vv

DAY 178 TIME 0:40 PRSS 17 m= .9489, sd= 1.43188



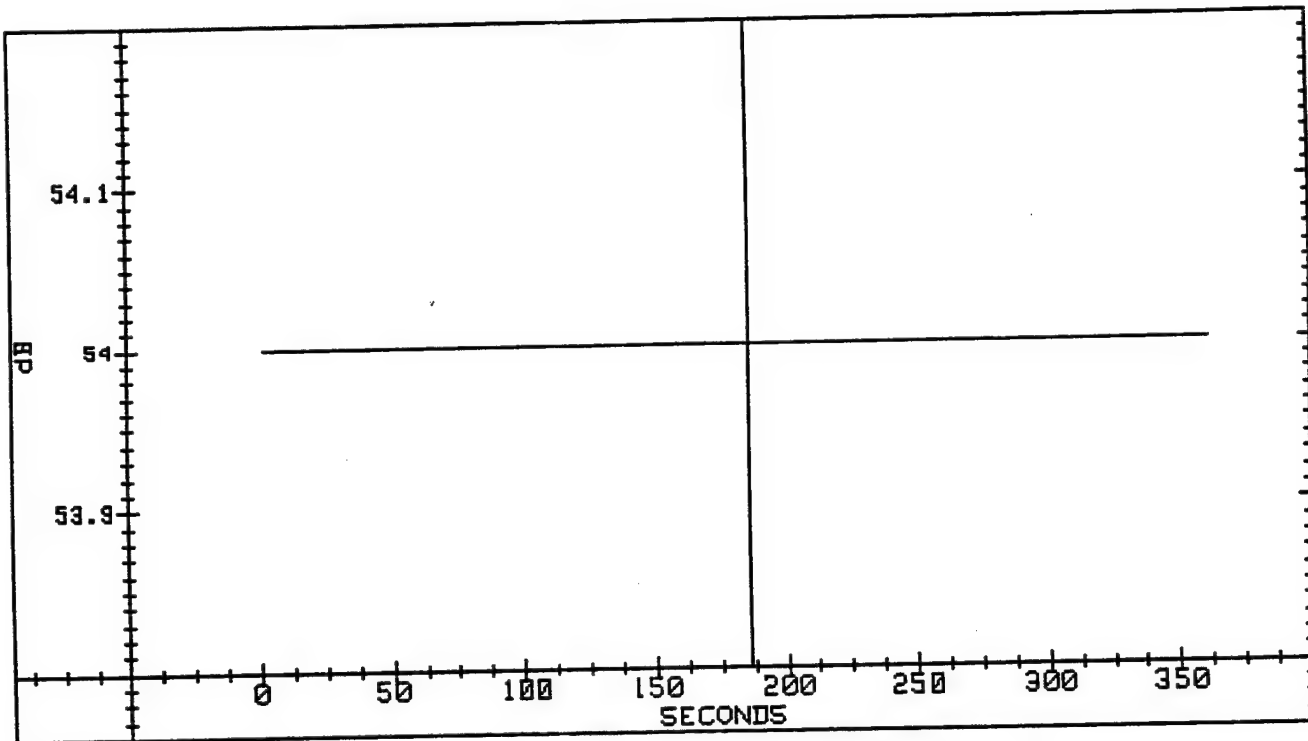
Ch1 RES Attenuation

DAY 170 TIME 0:40 PASS 17 m= 54, sd= 0



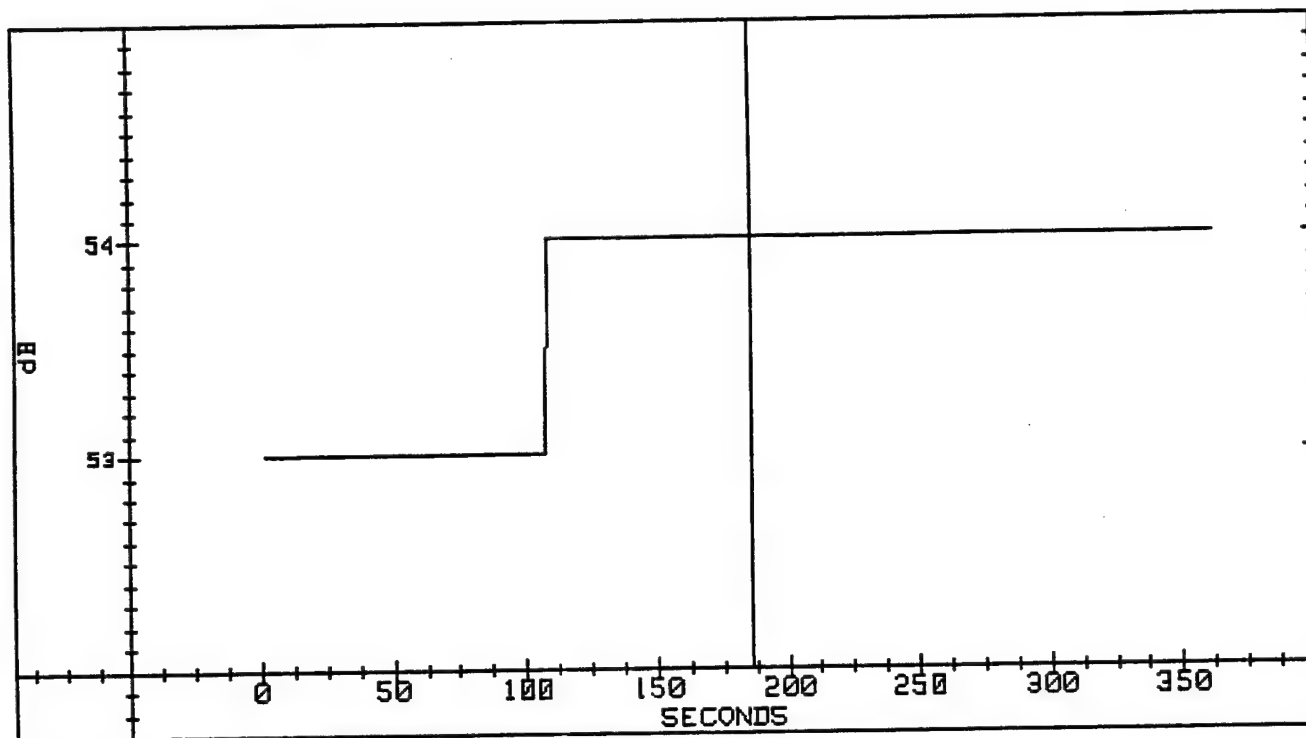
Ch2 RES Attenuation

DAY 170 TIME 0:40 PASS 17 m= 54. sd= 0



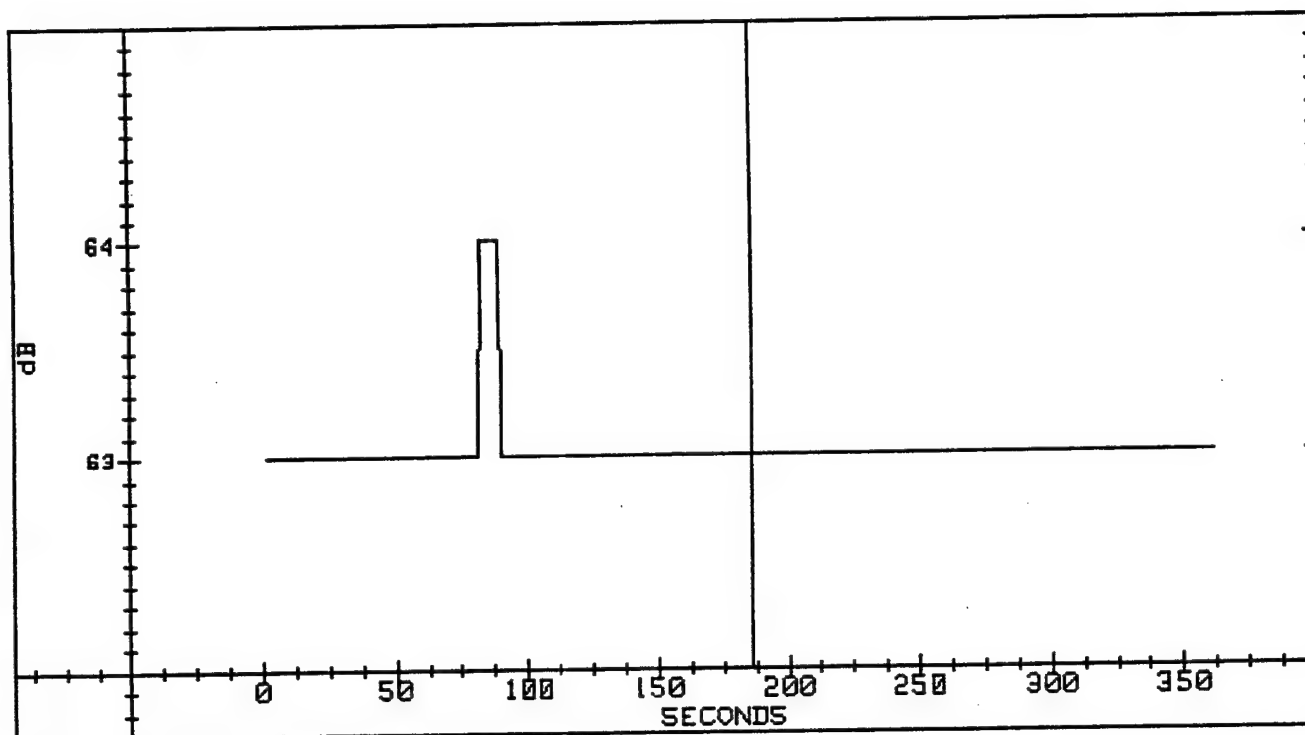
Ch3 RES Attenuation

DAY 178 TIME 0:40 PASS 17 m= 54, sd= 0



Ch4 RES Attenuation

DAY 178 TIME 0:40 PASS 17 m= 63, sd= 0



GPS ALTITUDE

MEAN= 10139.1 STANDARD DEVIATION= 54.0109

DATE: June 26, 1995 PASS 17

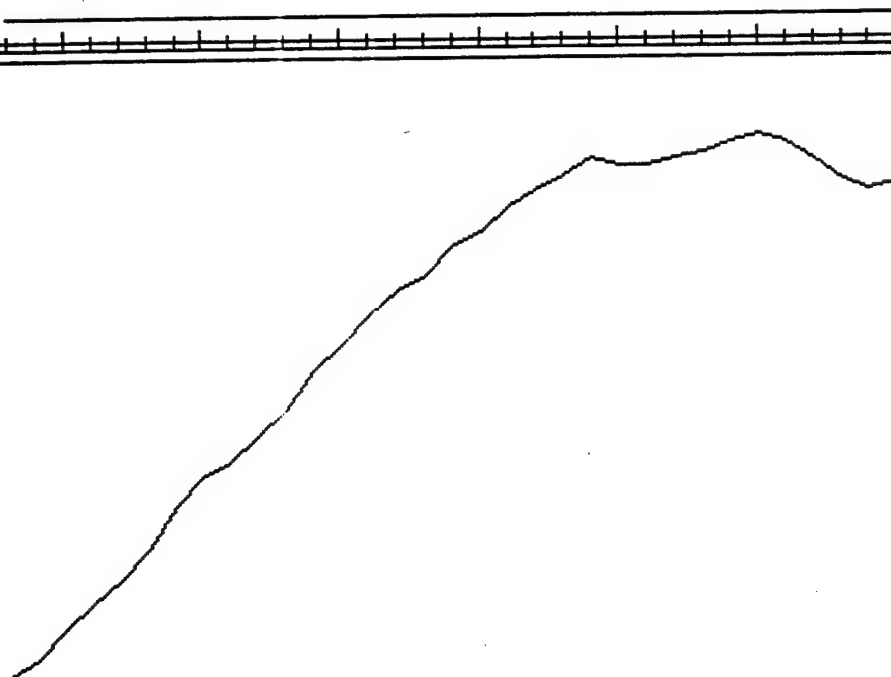
OFF
ON
BAR

10200
10180
10160
10140
10120
10100
10080
10060
10040

FEET

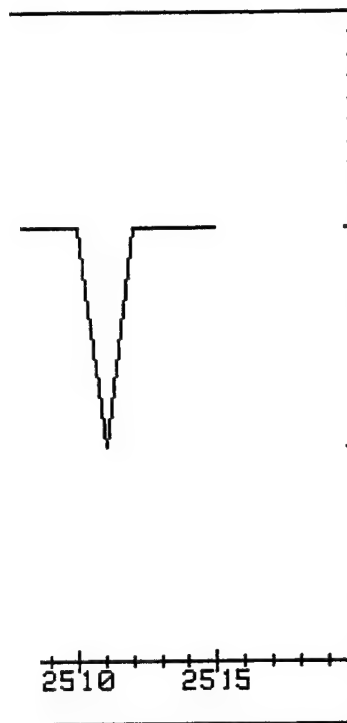
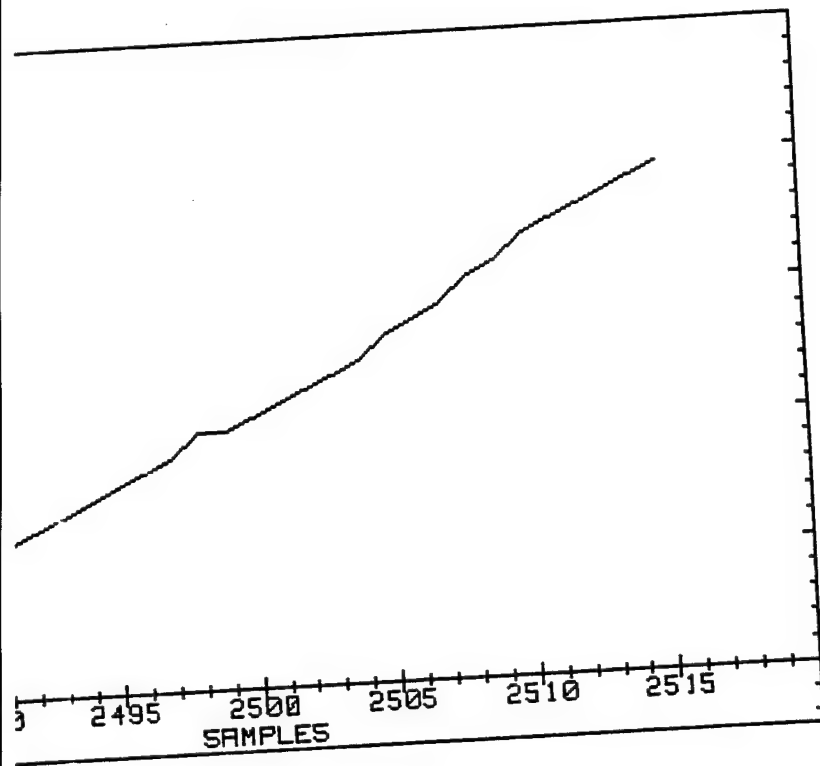
2485 2490 2495 2500 2505 2510 2515

SAMPLES

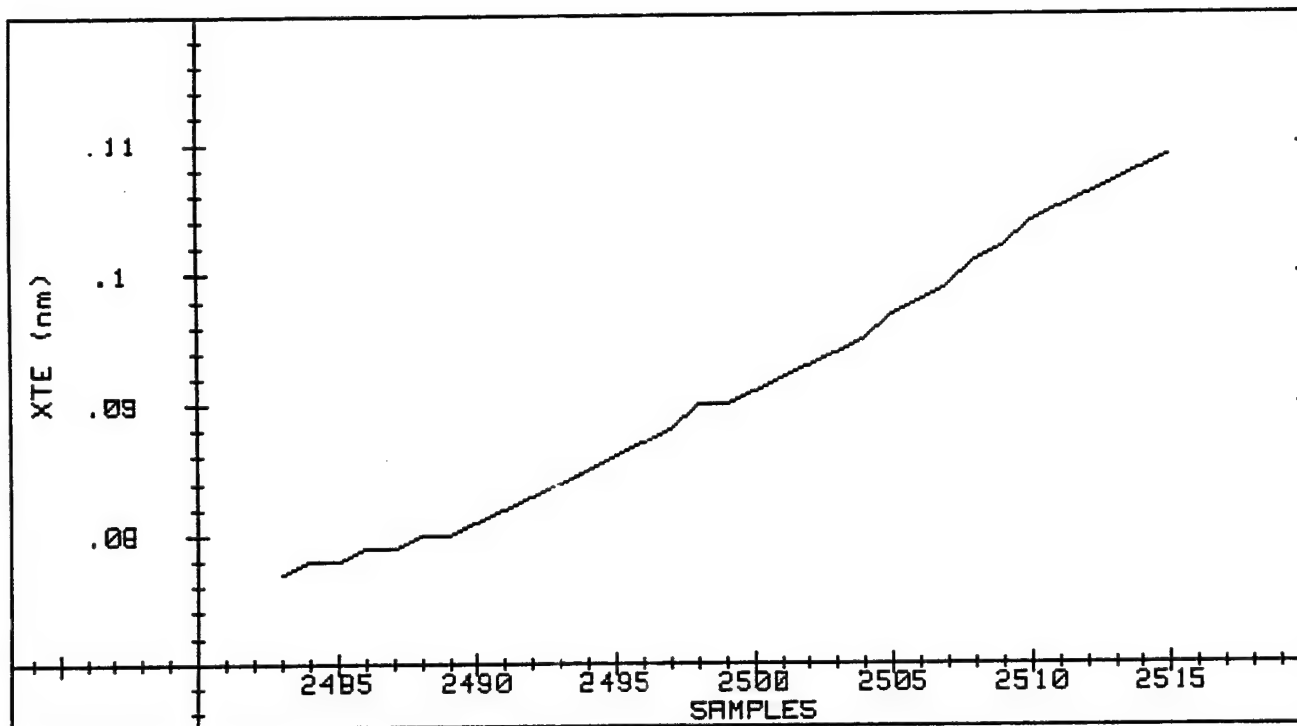


Cross Track Error
STANDARD DEVIATION= .0100064
ine 26, 1995 PASS 17

8506



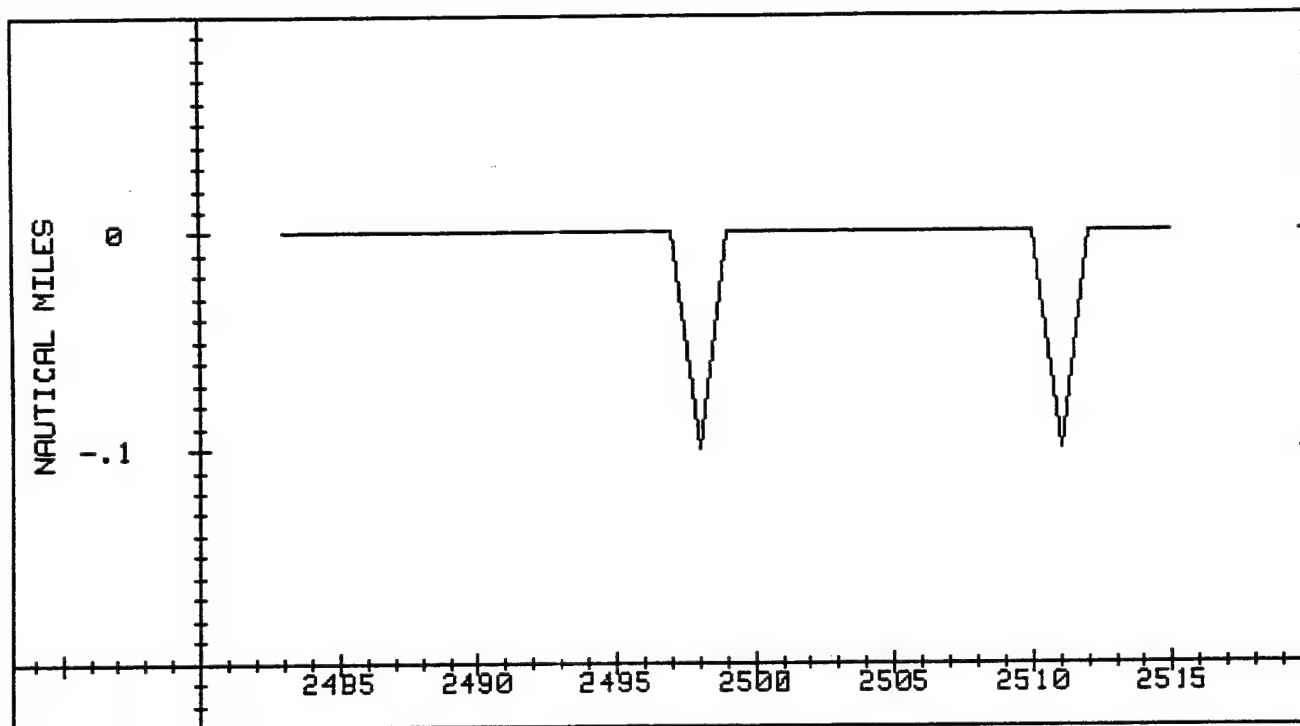
GPS Cross Track Error
MEAN= .0811515 STANDARD DEVIATION= .0100054
DATE: June 26, 1995 PASS 17



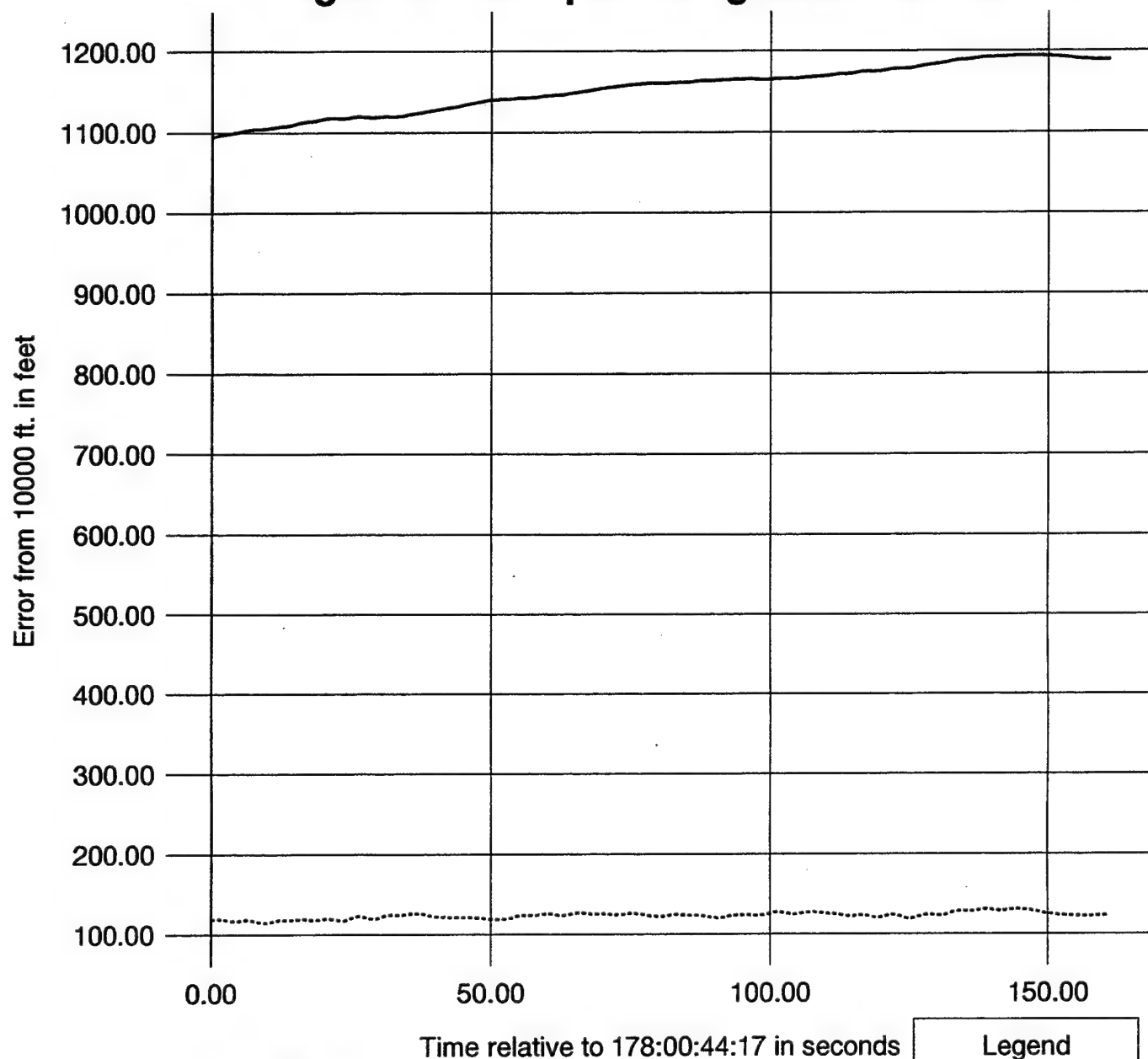
INS CROSS TRACK ERROR

MEAN- -.00606061 STANDARD DEVIATION- .0238606

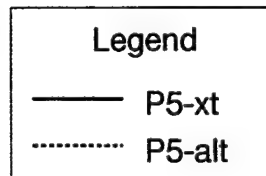
DATE: June 26, 1995 PASS 17



Portage, ME - June 26, 1995 - Pass 17 - Xtk. and Alt. Errors Higher alt. and port are greater than zero



	Mean	St. Dev.
ALT.	123.13	3.40
XTK.	1153.63	28.92



27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 33
Mission: PORTAGE MAINE, DAY

Time: 178:01:01:46
Pass 18
Req.# 18

AIRCRAFT & CHANNEL DATA

Altitude		CH 1	CH 2	CH 3	CH 4
Desired:	7000 ft	p-VV	p-VH	p-HV	p-HH
Baro:	6834 ft s.d.=	8 Swath Ctr Ang:	20.0°	20.0°	20.0°
Slt. rng:	18537 ft	Tgt Dep Ang:	20.0°	20.0°	20.0°
Look:	Right	St rng (ft):	17001	17001	17001
Depr Ang:	25.0°	Near Rng Dep:	23.7°	23.7°	23.7°
Des. trk:	276.0°	Far Rng Dep:	11.9°	11.9°	11.9°
Start Sq:	90.0°	Atten (dB):	54.0	52.0	54.0
End Sq:	90.0°	RMS Video (%FS)	18.2	26.4	13.8
					27.8

WAYPOINTS

	Latitude	Longitude
Line up:	N 46:40.30	W 68:06.18
Start:	N 46:41.59	W 68:23.50
End:	N 46:42.64	W 68:37.97
From:	N 42:35.97	W 45:47.31
To:	N 45:53.24	W 92:36.79

Main Target: SIG
Mocomp Point:
Lat: N 46:44.97
Long: W 68:30.30
Tgt Trk: 0.0 Tgt Vel: 0.0
Alt: 660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1
Resolution: N/A
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6
TX Chirp Filename: CTL1U2B

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts)
Ave Gndspd: Real -> 254.1 kts
Mocomp Off for Chnl 1, 2, 3, 4
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF
RX Chirp Filename: CRL1N0A

Ave Ref Vel -> -5.8 fps (s.d.= 12.8)
Ave Fil Vel -> -7.2 fps (s.d.= 12.4)

NML XMIT PWR
X: -70.0
L: -70.0
C: -70.0
P: 47.1

ANT BIAS
Elevation: 0.0°
Azimuth: 0.0°
Pitch: 0.0°

Tape Footage
Starting: 1454 ft (1)
Ending: 2679 ft (1)

Vel Bias
X: 1035.0
Y: -433.0
Z: 6697.0

CAL Atten
X: 63.8 dB
L: 63.8 dB
C: 63.8 dB

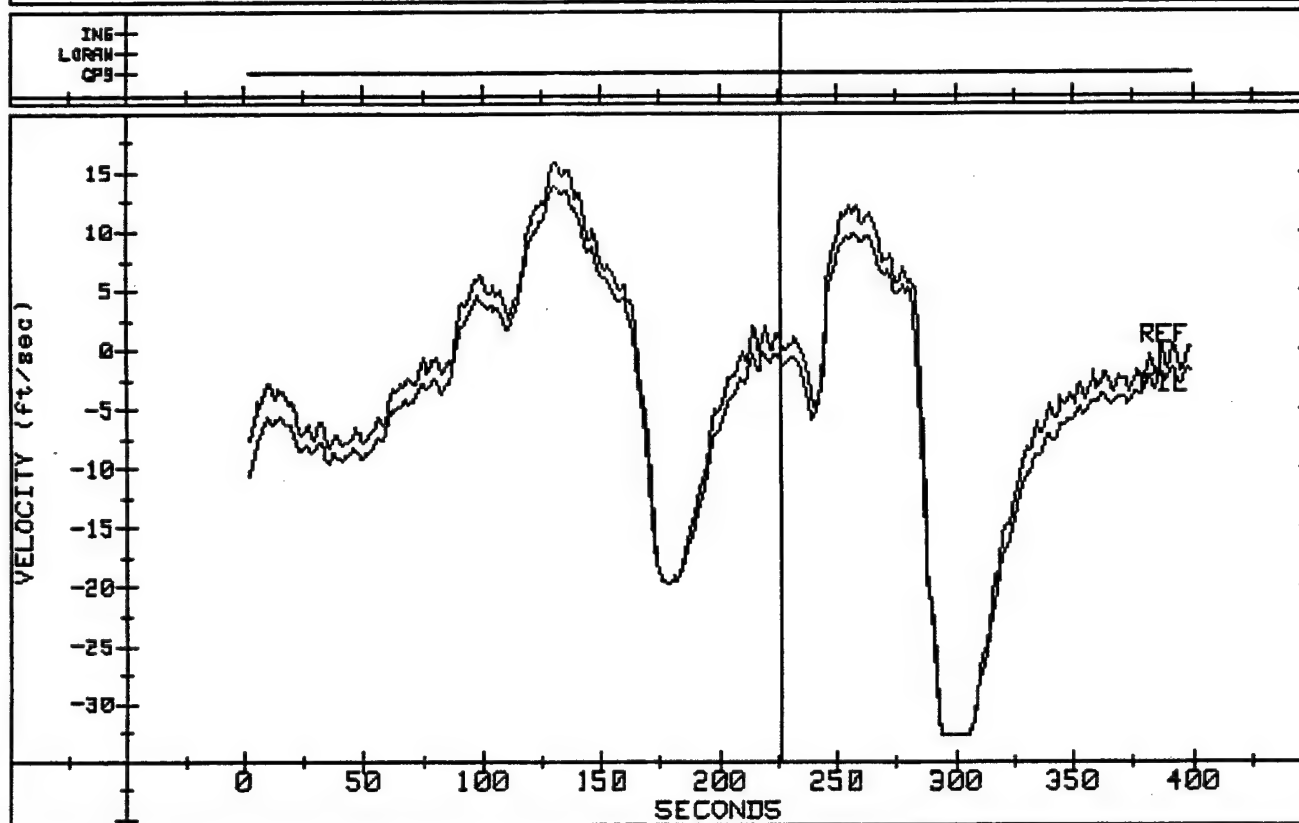
LINE Map Time (UCT)
Start: 01:01:46
End: 01:04:24

Mocomp Counters

Start: 1087785 00109929h
End: 1114252 0011008Ch

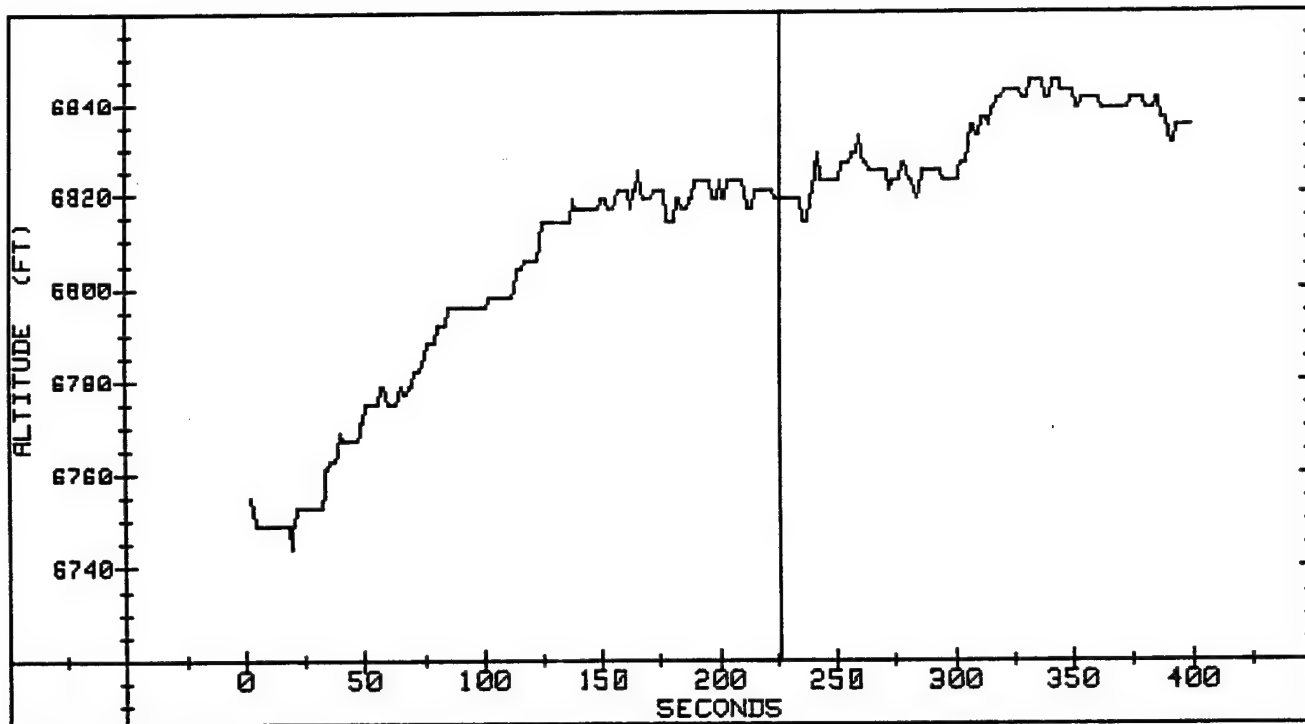
CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 170 TIME 0:57 PASS 10



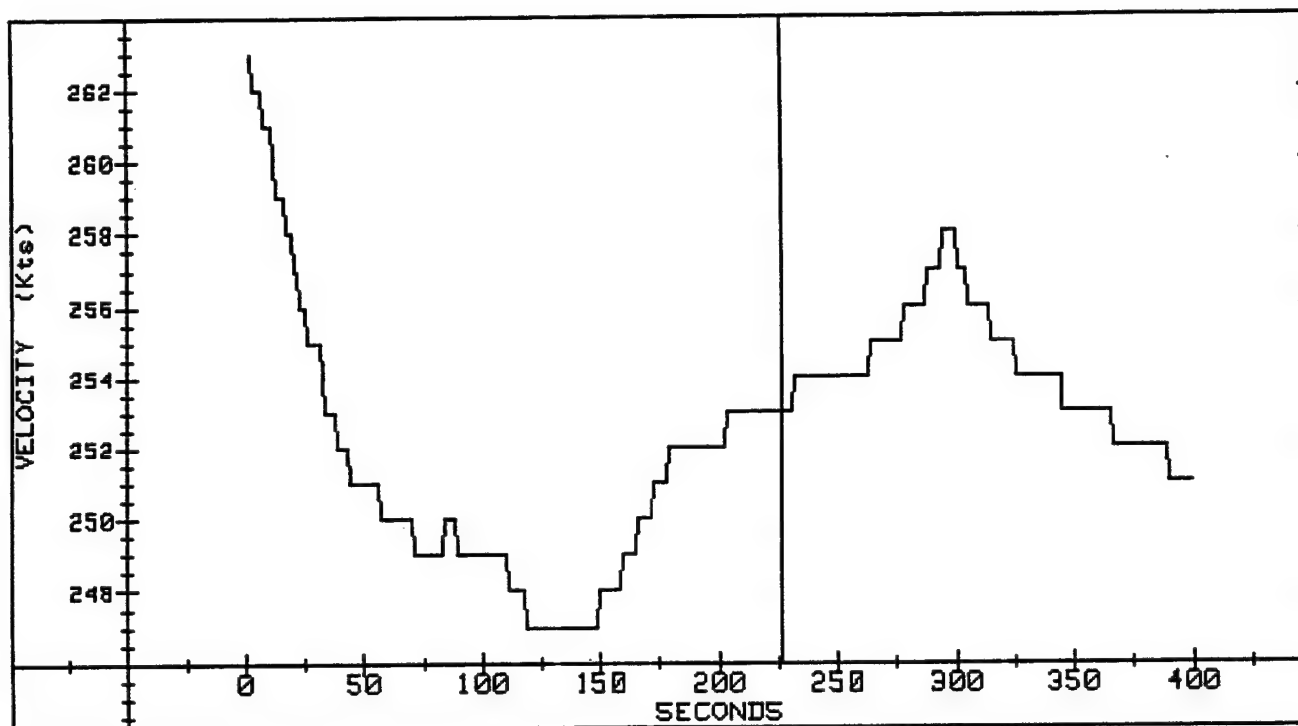
BARO ALTITUDE

DAY 178 TIME 0:57 PASS 10 m= 6034, sd= 7.92998



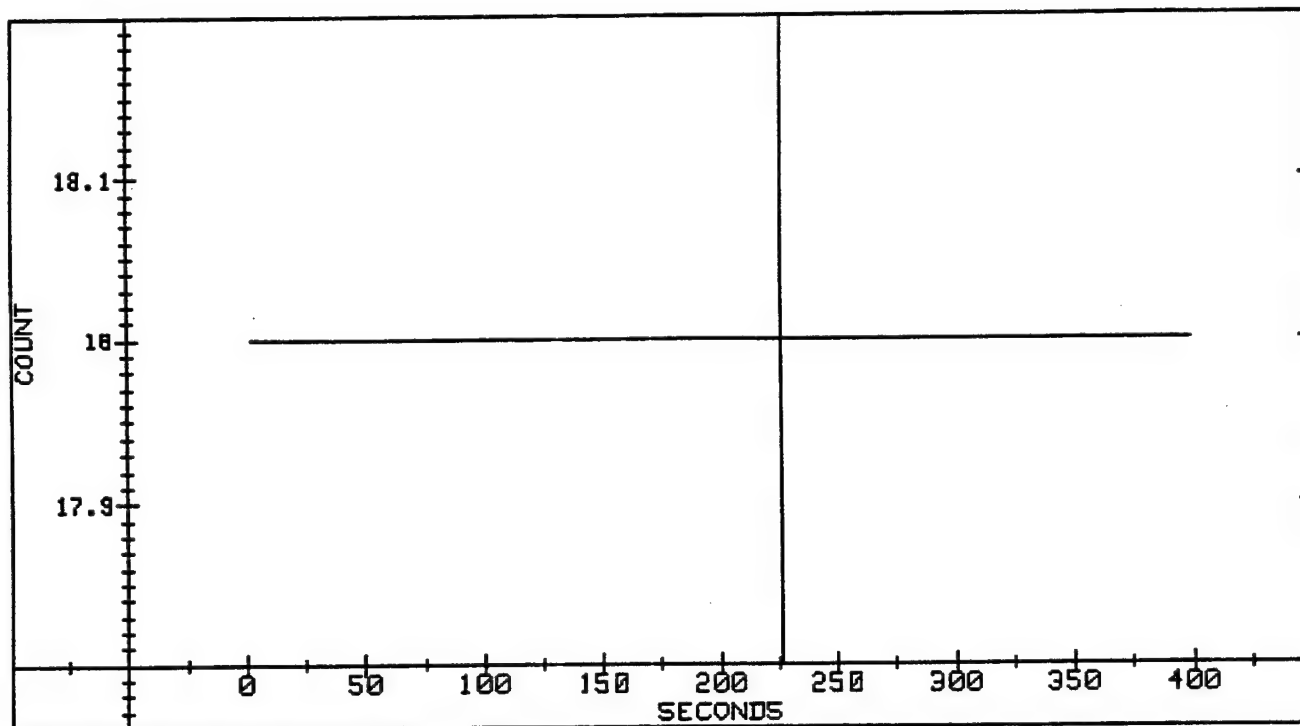
INS GROUND SPEED

DRY 178 TIME 0:57 PASS 18 m= 254.1, sd= 1.78200



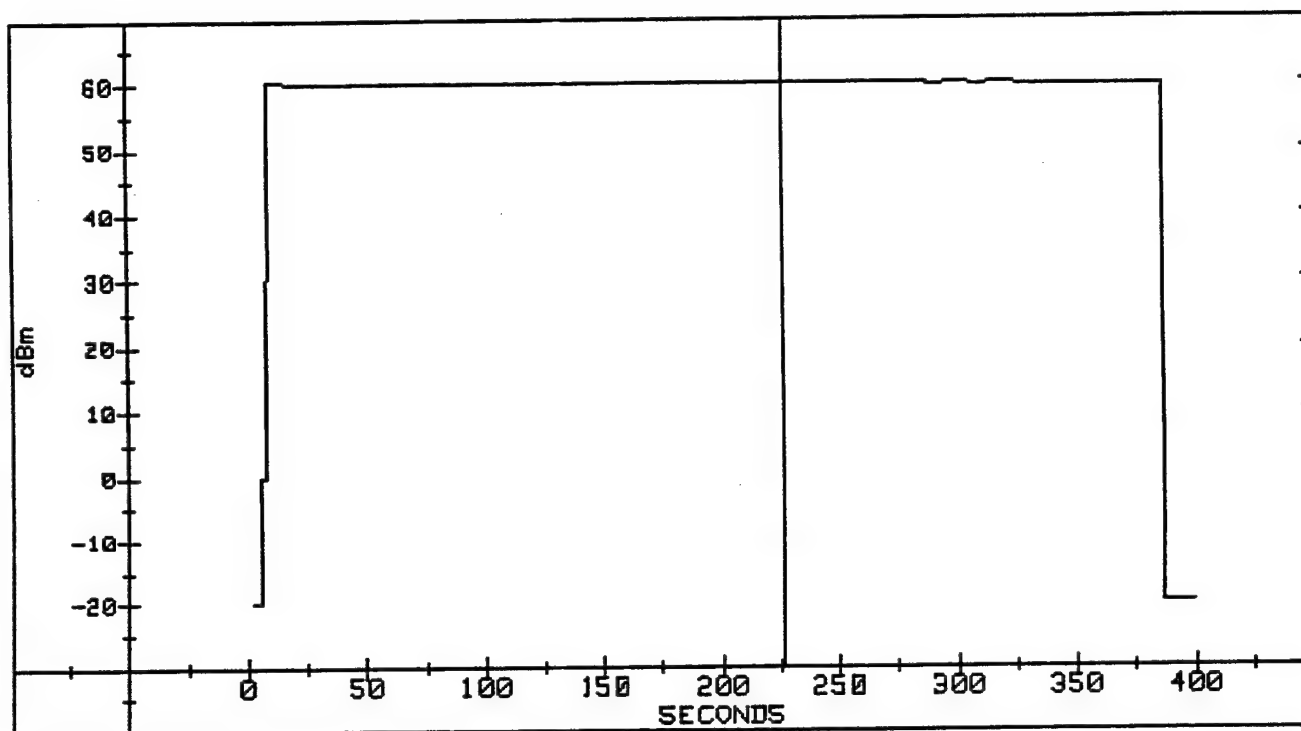
PASS NUMBER

DAY 178 TIME 0:57 PASS 18 m= 18, sd= 0



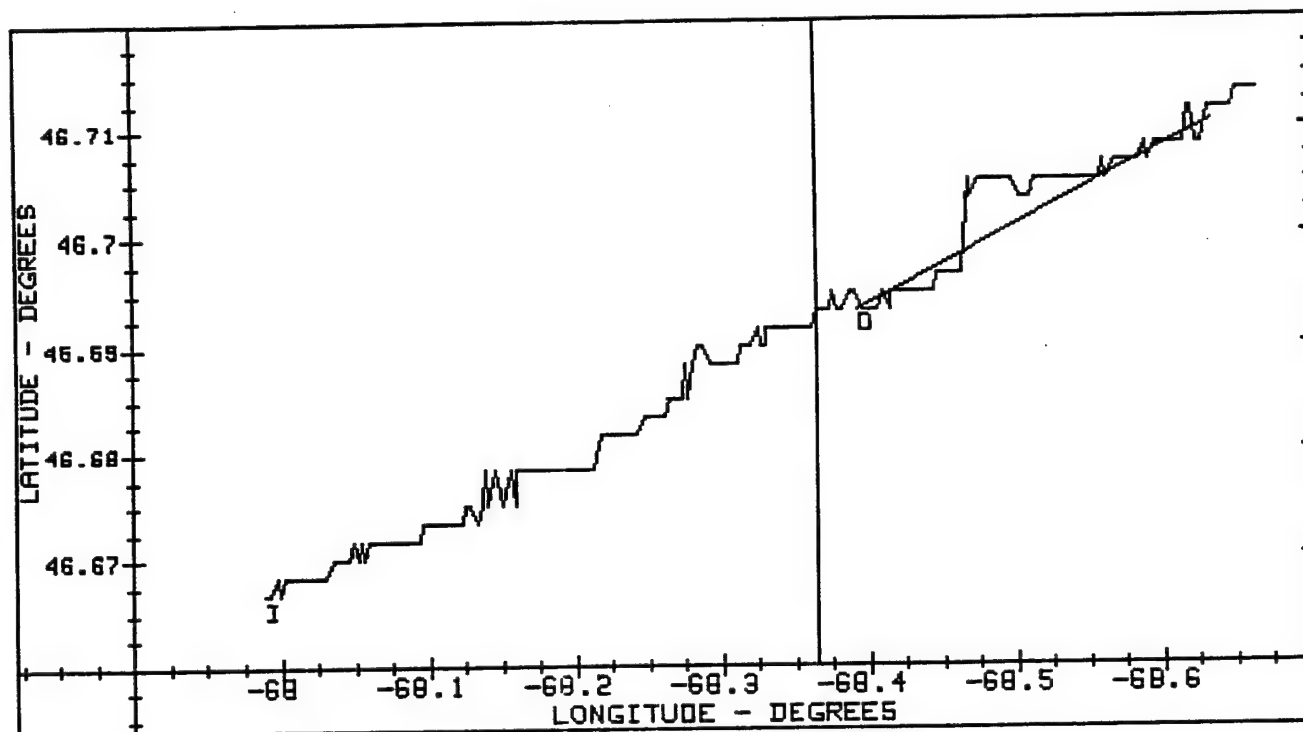
P Band Power

DRY 178 TIME 0:57 PASS 18 m= 53.32, sd= 21.8784



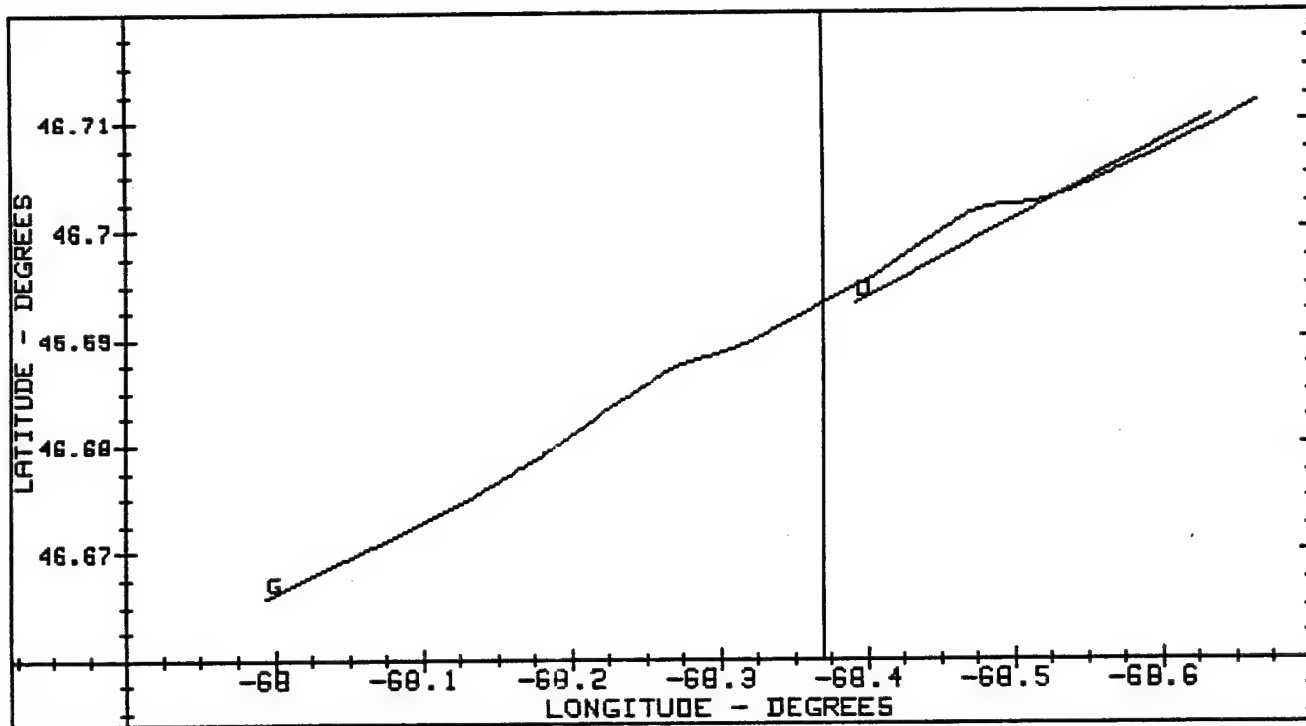
INS AIRCRAFT POSITION

DAY 178 TIME 0:57 PASS 10



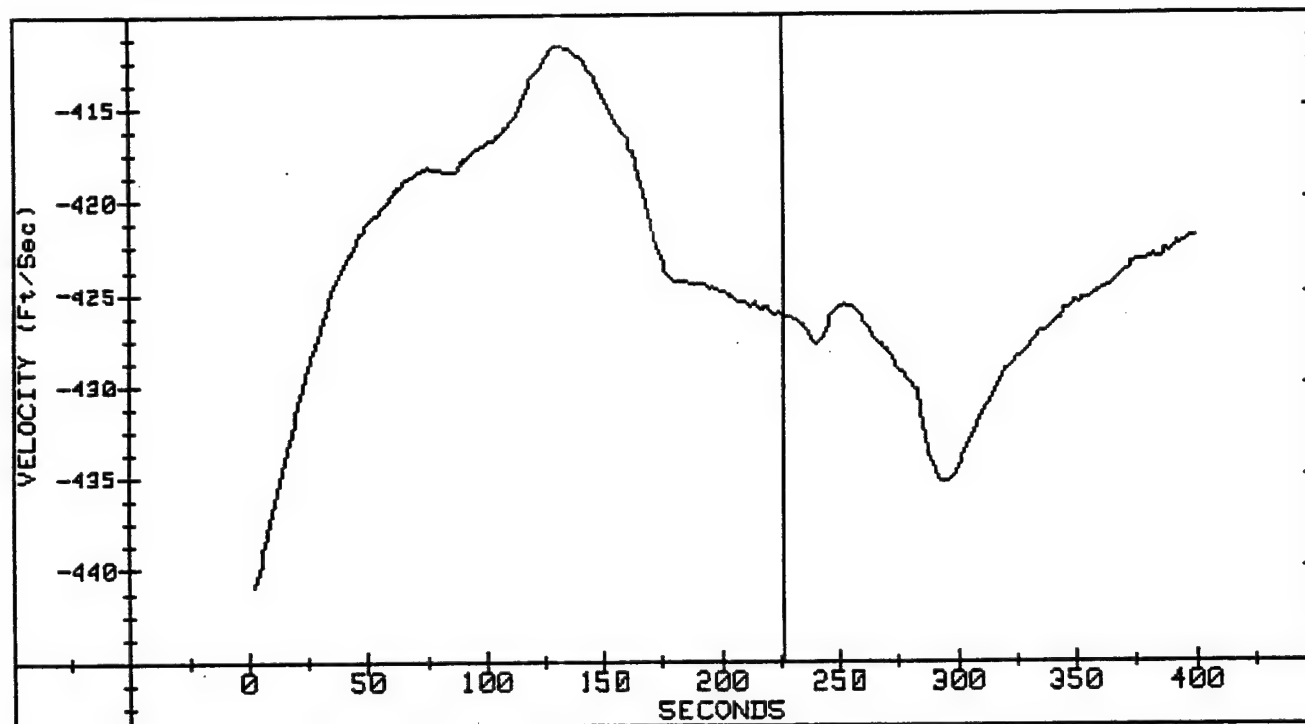
GPS AIRCRAFT POSITION

DAY 170 TIME 0:57 PASS 10



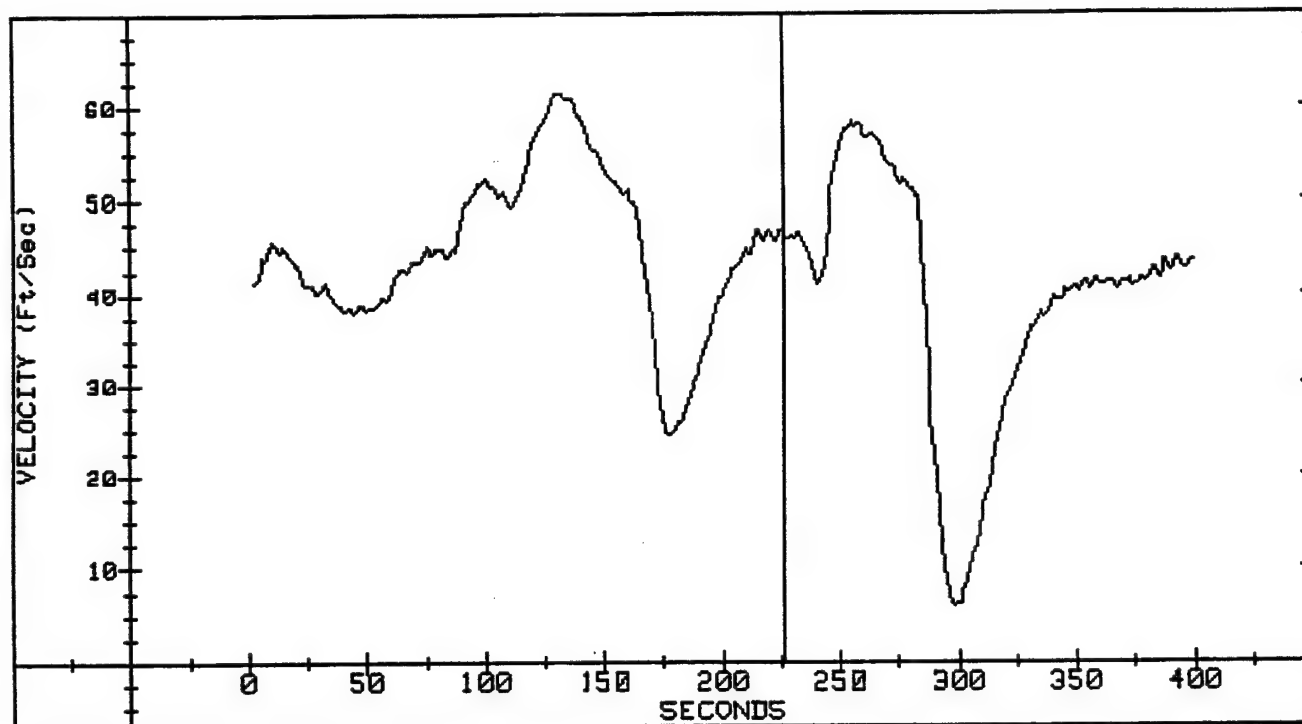
GPS V_e

DAY 170 TIME 0:57 PASS 10 m= -427.5, sd= 3.63306



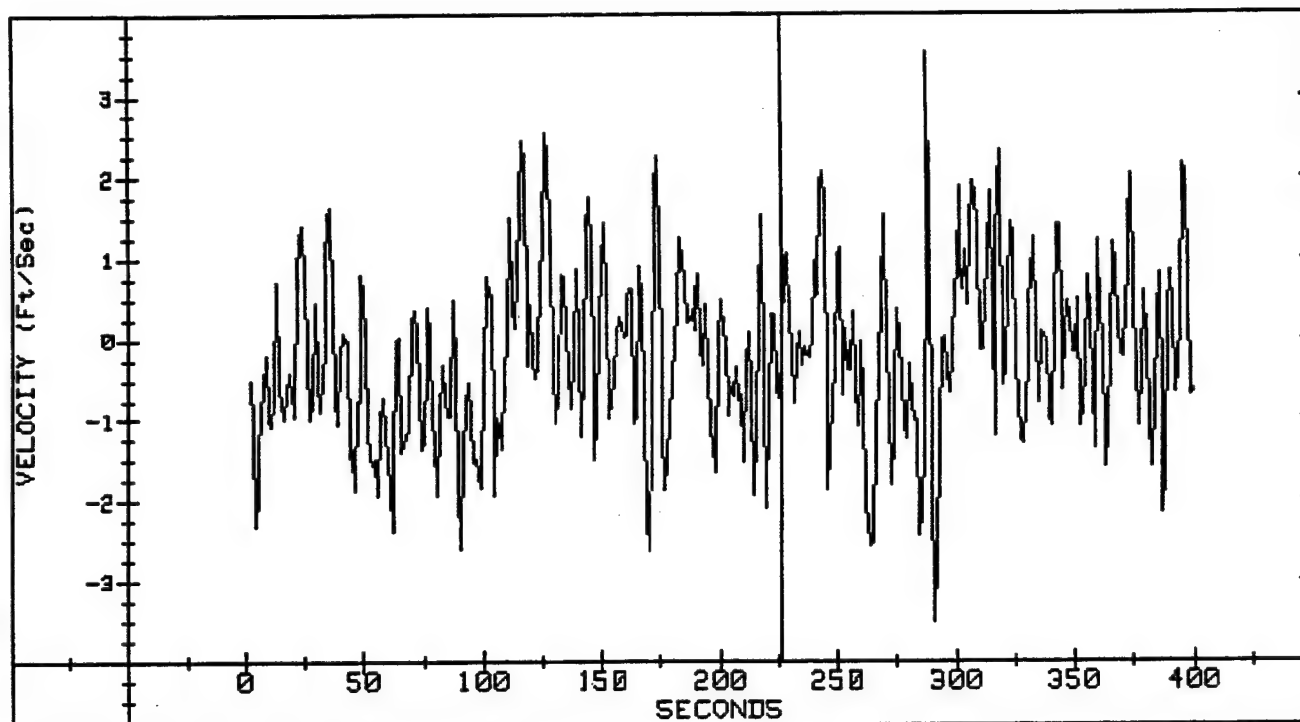
GPS Vn

DRY 178 TIME 0:57 PASS 18 m= 38.41, sd= 13.9816



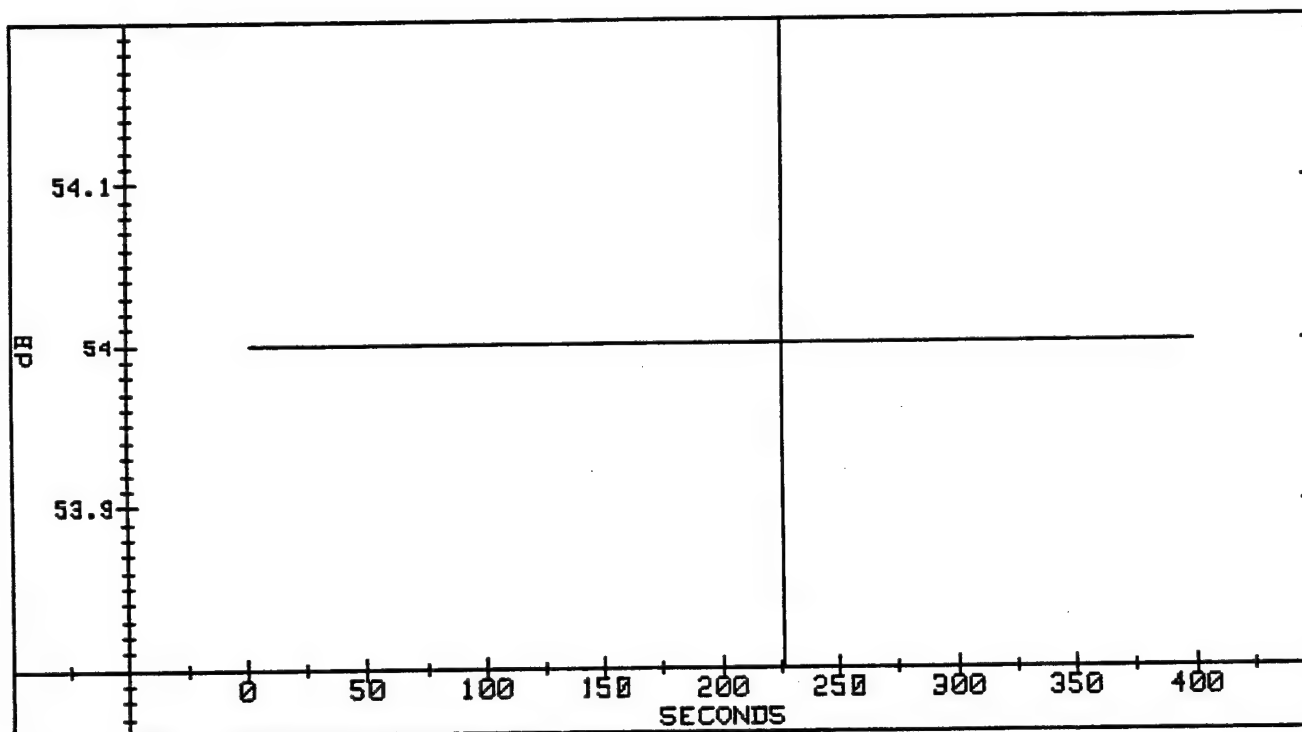
GPS Vv

DAY 178 TIME 0:57 PASS 18 m= -.06643, sd= 1.16203



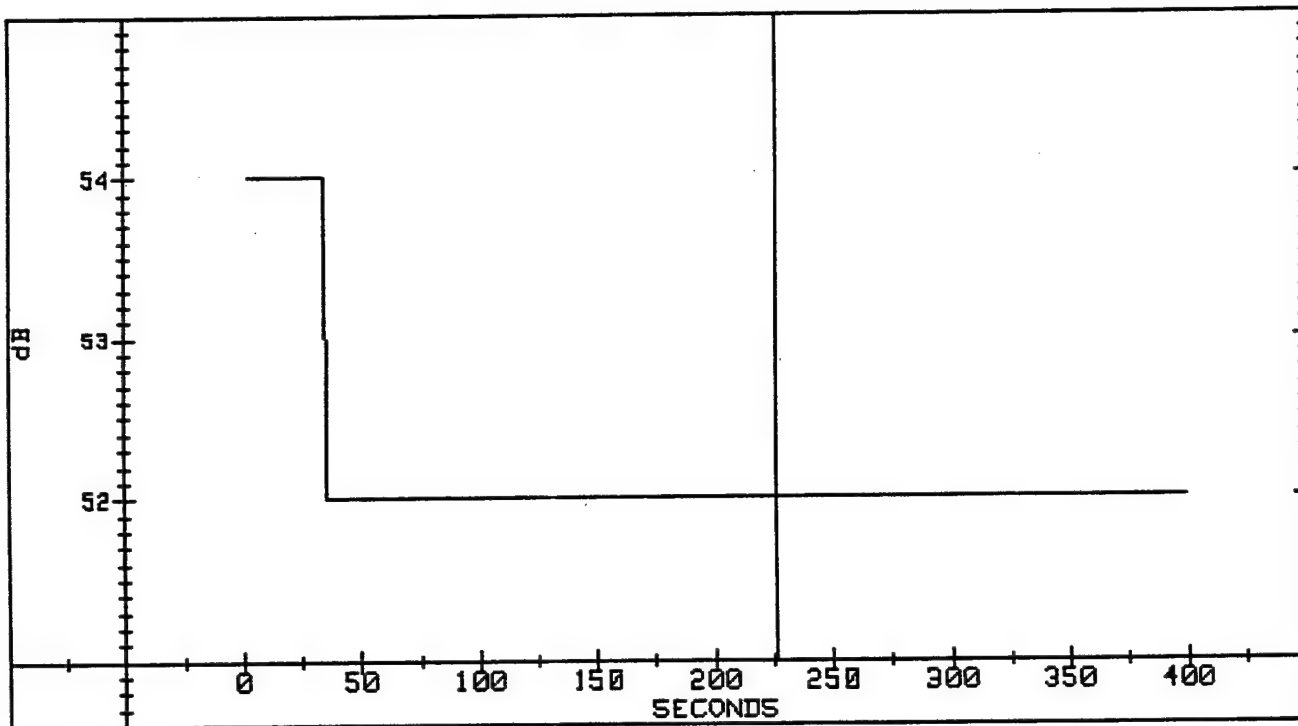
Ch1 RES Attenuation

DAY 178 TIME 0:57 PASS 18 m= 54, sd= 0



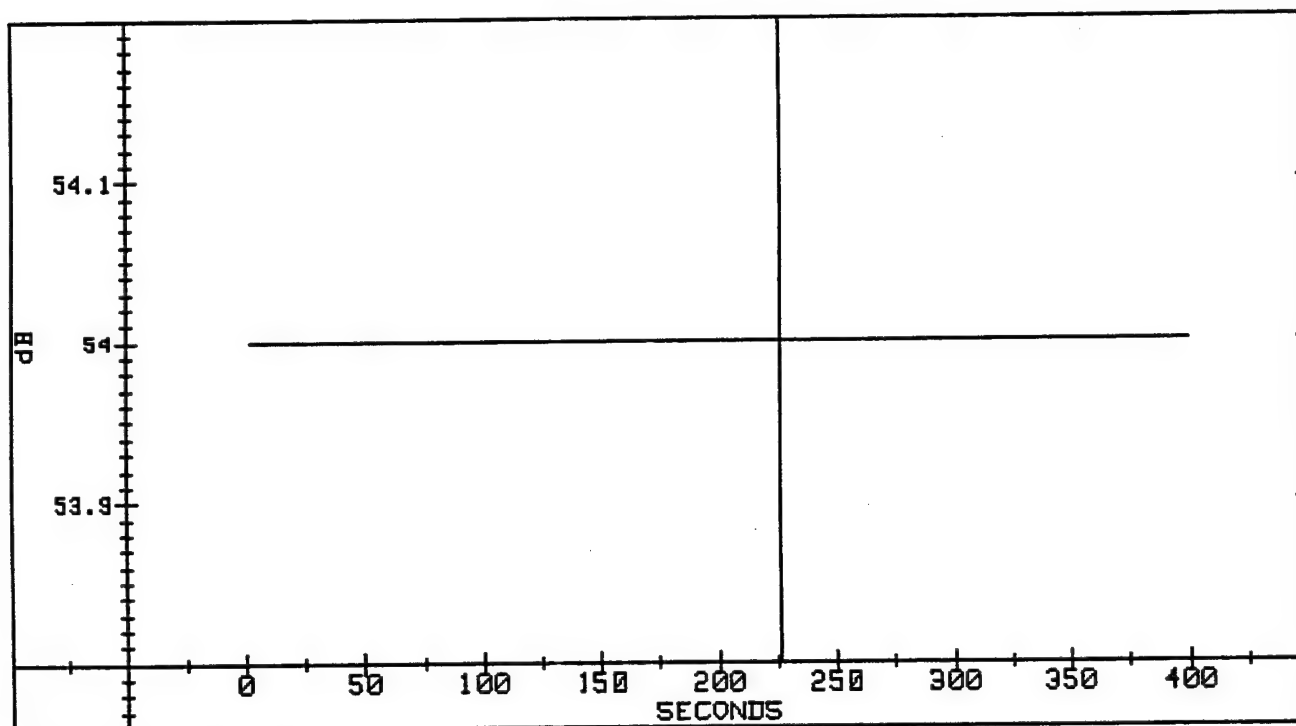
Ch2 RES Attenuation

DAY 178 TIME 0:57 PASS 18 m= 52, sd= 0



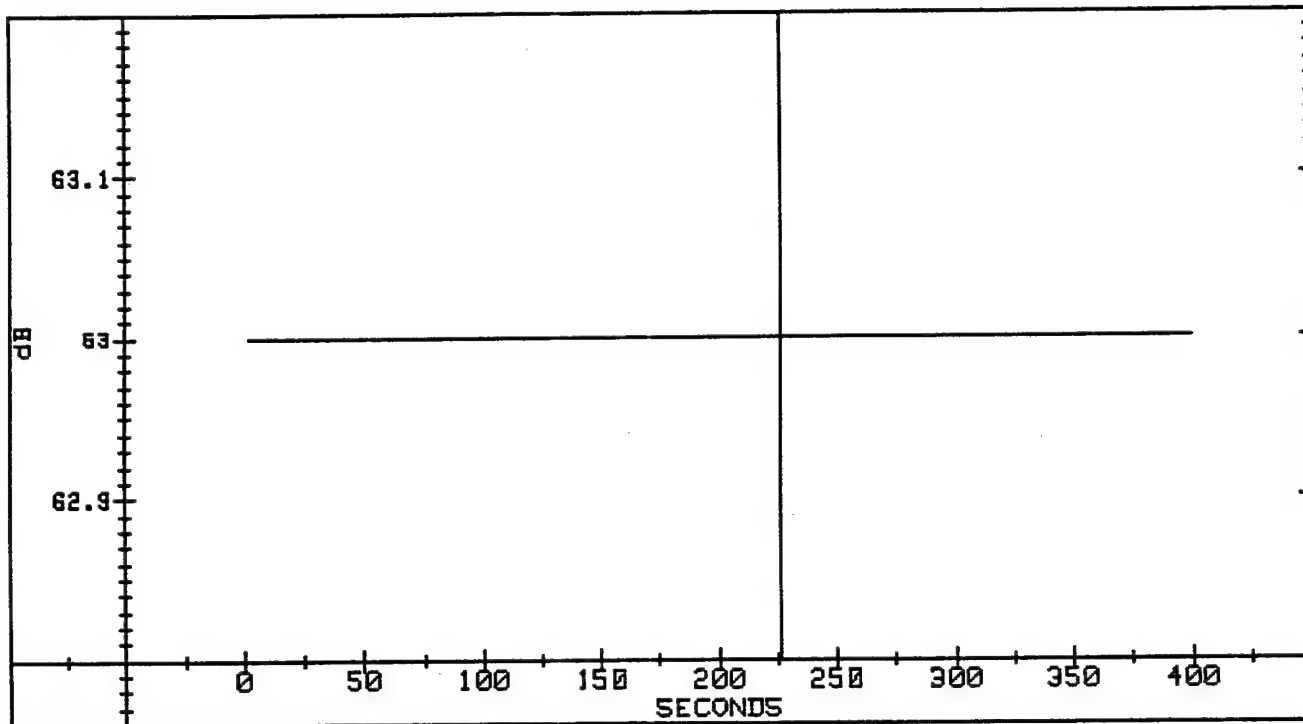
Ch3 RES Attenuation

DAY 178 TIME 0:57 PASS 18 m= 54, sd= 0



Ch4 RES Attenuation

DAY 178 TIME 0:57 PASS 18 m= 63, sd= 0

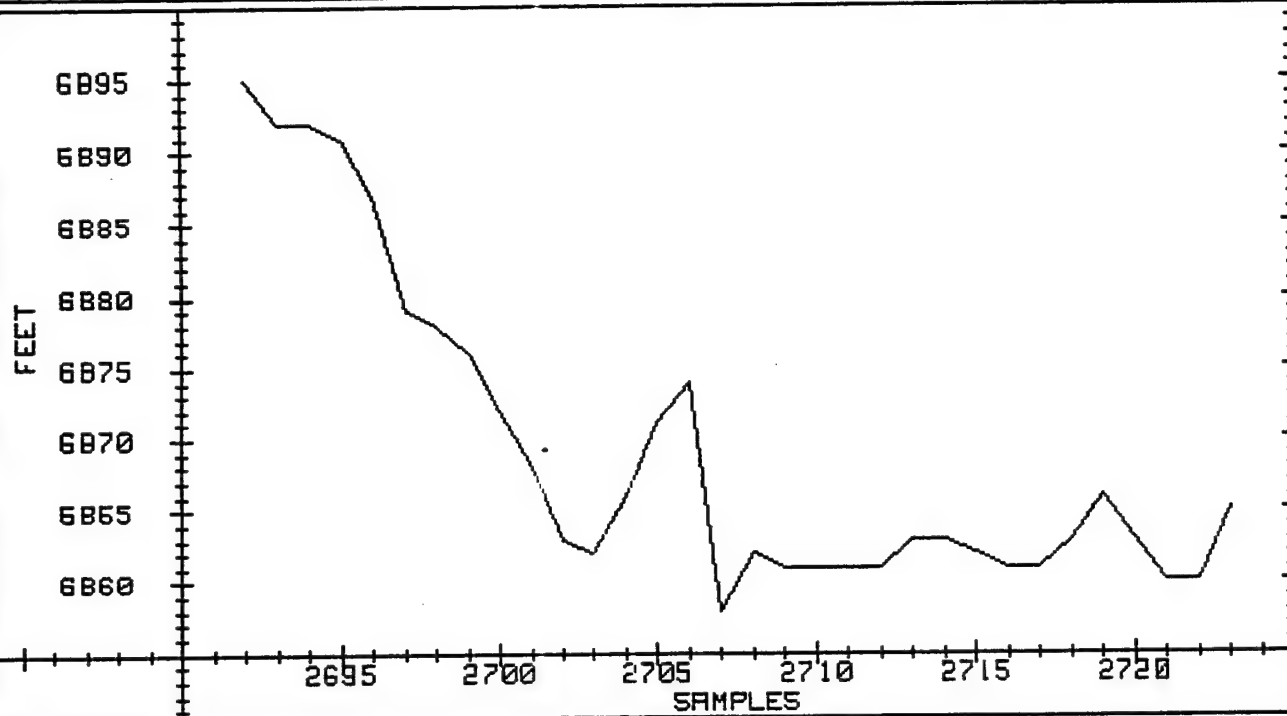


GPS ALTITUDE

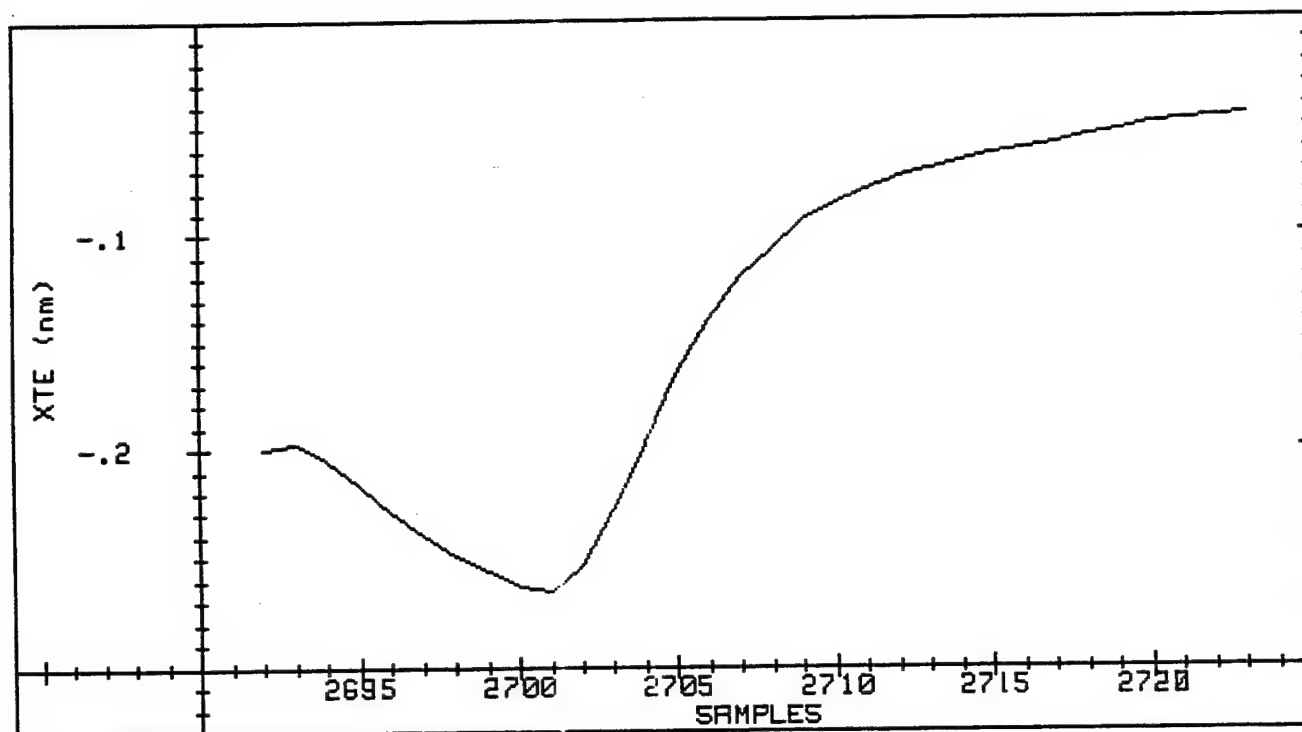
MEAN= 6869.28 STANDARD DEVIATION= 10.9494

DATE: June 26, 1995 PASS 18

OFF
ON
BAR



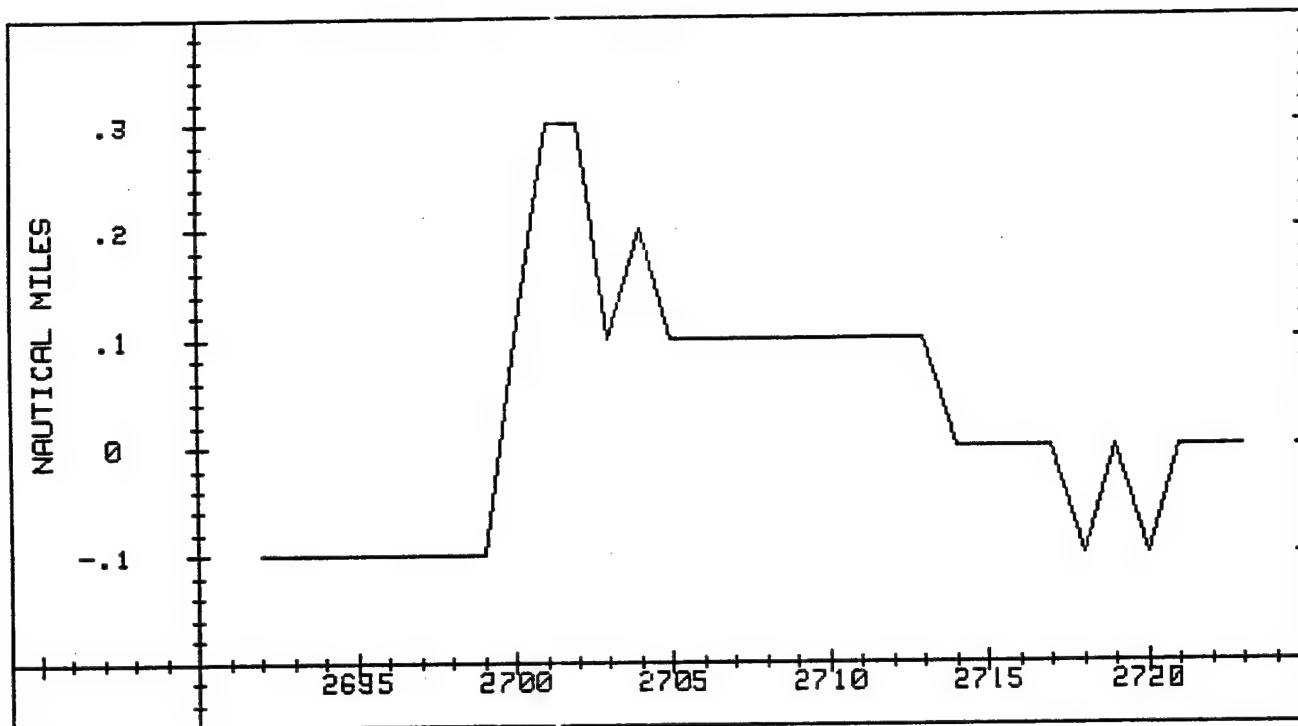
GPS Cross Track Error
MEAN= -.13975 STANDARD DEVIATION= .0605977
DATE: June 26, 1995 PASS 18



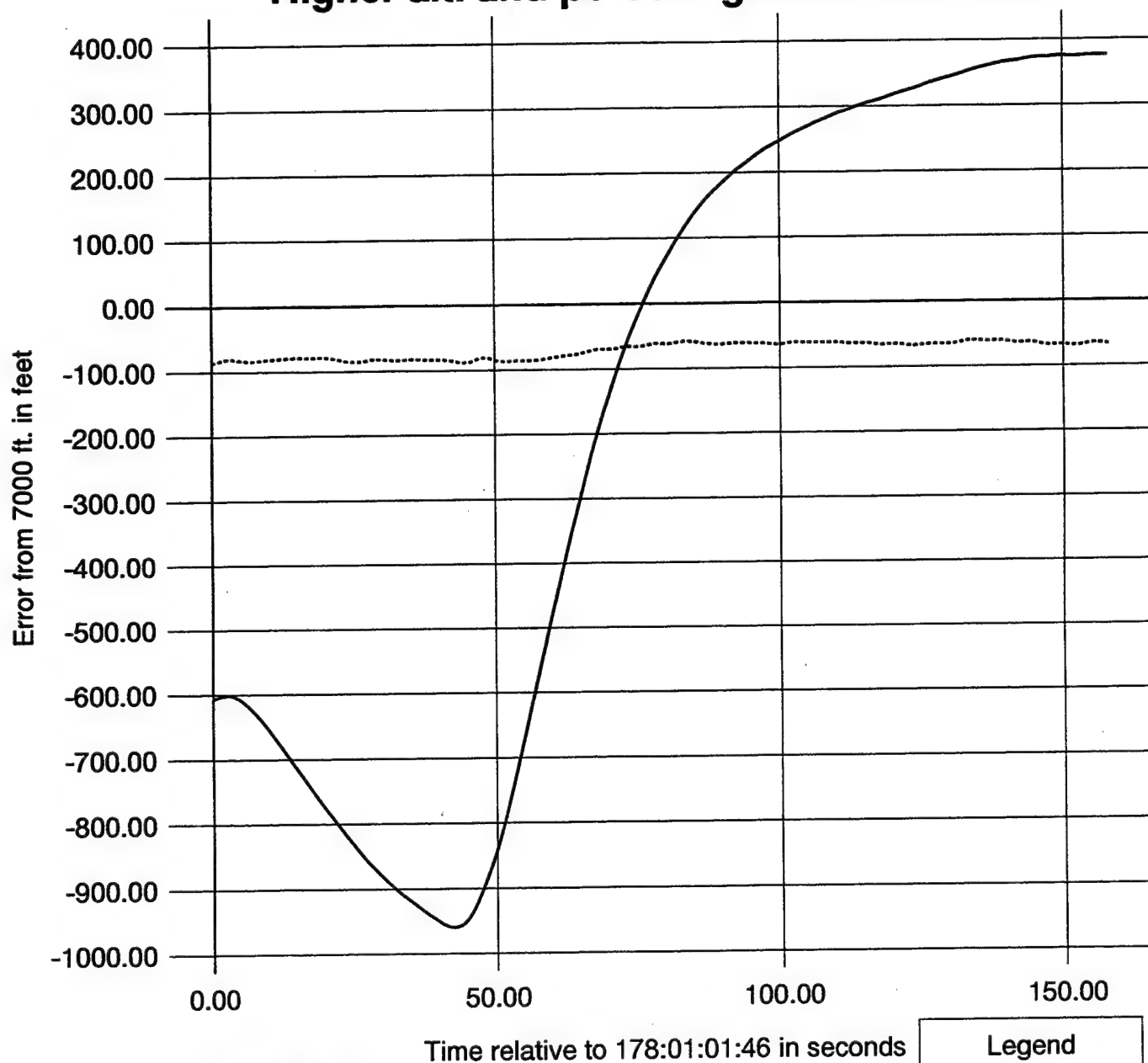
INS CROSS TRACK ERROR

MEAN= .028125 STANDARD DEVIATION= .112457

DATE: June 26, 1995 PASS 18



Portage, ME - June 26, 1995 - Pass 18 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



	Mean	St. Dev.
ALT.	-71.84	9.59
XTK.	-172.02	510.99

27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 35
Mission: PORTAGE MAINE, DAY

Time: 178:01:13:38
Pass 19
Req.# 19

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	6000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	5845 ft s.d.=	2 Swath Ctr Ang:	15.0°	15.0°	15.0°	15.0°
Slt. rng:	20632 ft	Tgt Dep Ang:	15.0°	15.0°	15.0°	15.0°
Look:	Right	St rng (ft):	19097	19097	19097	19097
Depr Ang:	25.0°	Near Rng Dep:	17.8°	17.8°	17.8°	17.8°
Des. trk:	6.0°	Far Rng Dep:	9.6°	9.6°	9.6°	9.6°
Start Sq:	90.0°	Atten (dB):	54.0	48.0	50.0	63.0
End Sq:	90.0°	RMS Video (%FS)	13.1	15.0	13.3	16.5

WAYPOINTS

	Latitude	Longitude
Line up:	N 46:28.17	W 68:37.88
Start:	N 46:40.10	W 68:36.07
End:	N 46:50.04	W 68:34.55
From:	N 30:07.84	W 70:34.28
To:	N 63:14.58	W 64:47.49

Main Target: GP
Mocomp Point:
Lat: N 46:44.73
Long: W 68:30.56
Tgt Trk: 0.0 Tgt Vel: 0.0
Alt: 660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1
Resolution: N/A
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6
TX Chirp Filename: CTL1U2B

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts) -
Ave Gndspd: Real -> 250.6 kts
Mocomp Off for Chnl 1, 2, 3, 4
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF
RX Chirp Filename: CRL1N0A

Ave Ref Vel -> -.1 fps (s.d.= .8)
Ave Fil Vel -> -.6 fps (s.d.= .7)

NML XMIT PWR	ANT BIAS
X: -70.0	Elevation: 0.0°
L: -70.0	Azimuth: 0.0°
C: -70.0	Pitch: 0.0°
P: 46.2	

Tape Footage	Drive no.
Starting: 2694 ft	(1)
Ending: 3948 ft	(1)

Vel Bias	CAL Atten
X: 1035.0	X: 63.8 dB
Y: -433.0	L: 63.8 dB
Z: 6697.0	C: 63.8 dB

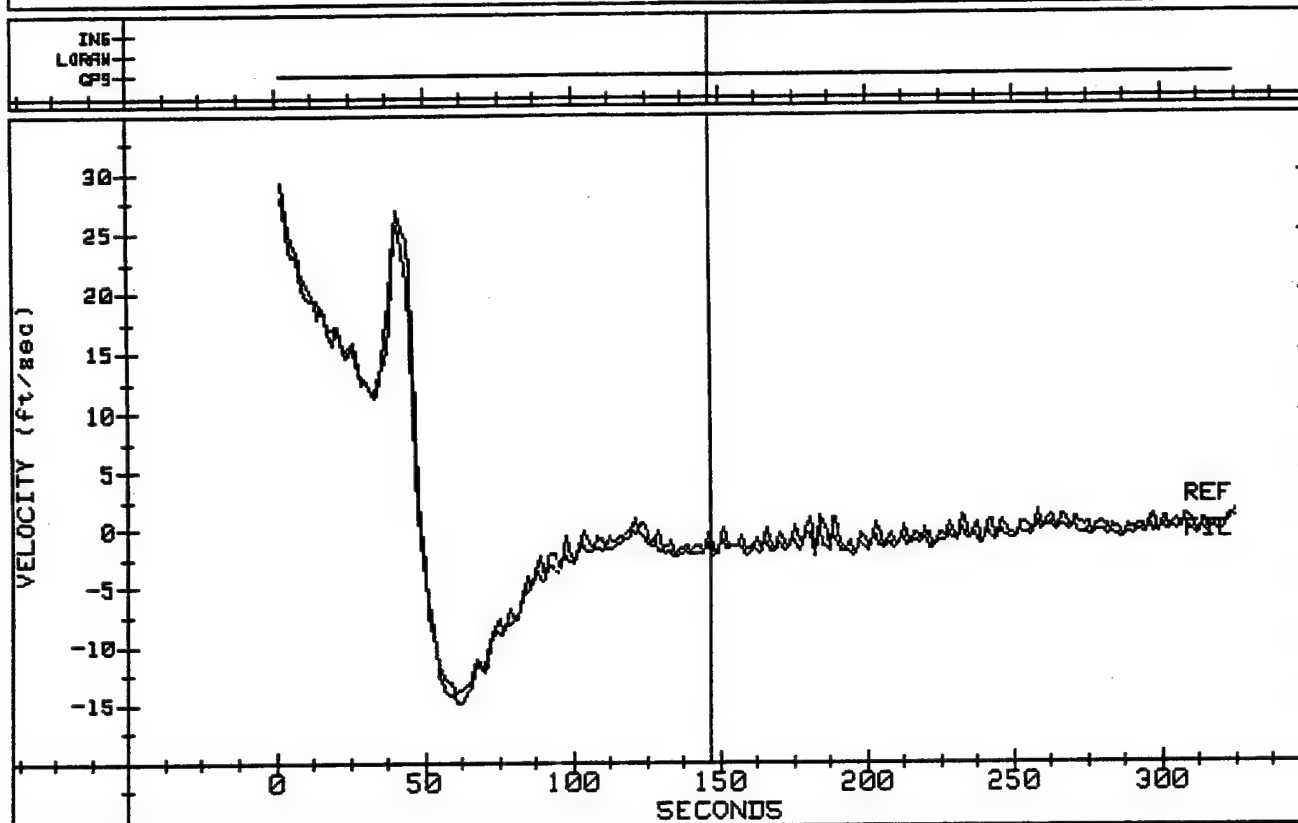
LINE Map Time (UCT)
Start: 01:13:38
End: 01:16:17

Mocomp Counters

Start: 1141976 00116CD8h
End: 1168601 0011D4D9h

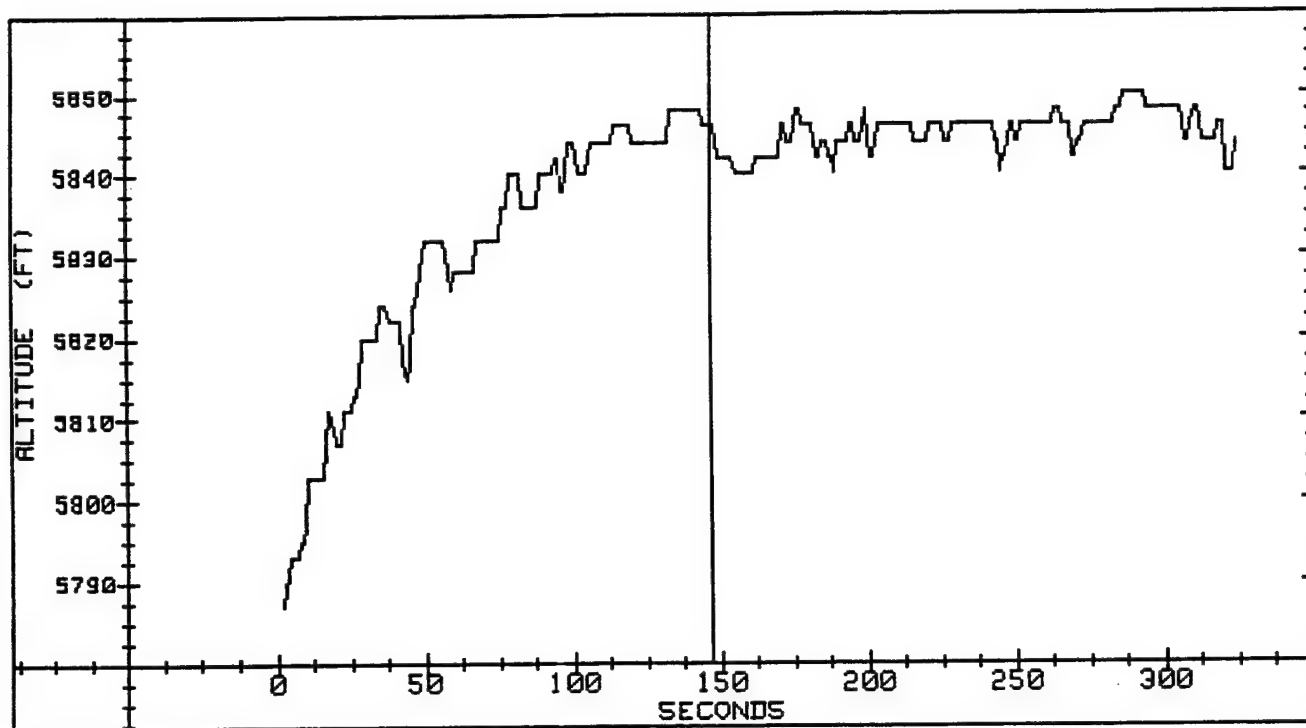
CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 178 TIME 1:10 PASS 19



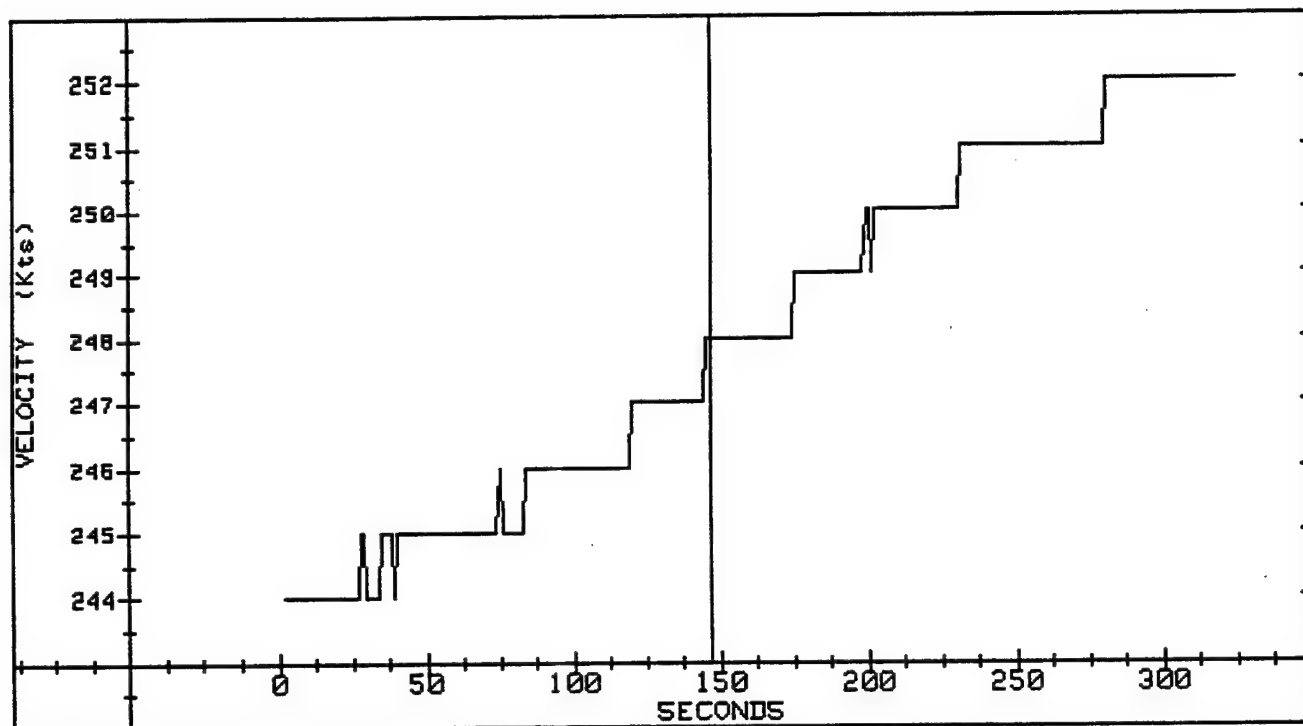
BARO ALTITUDE

DAY 170 TIME 1:10 PASS 19 m= 5845, sd= 2.1588



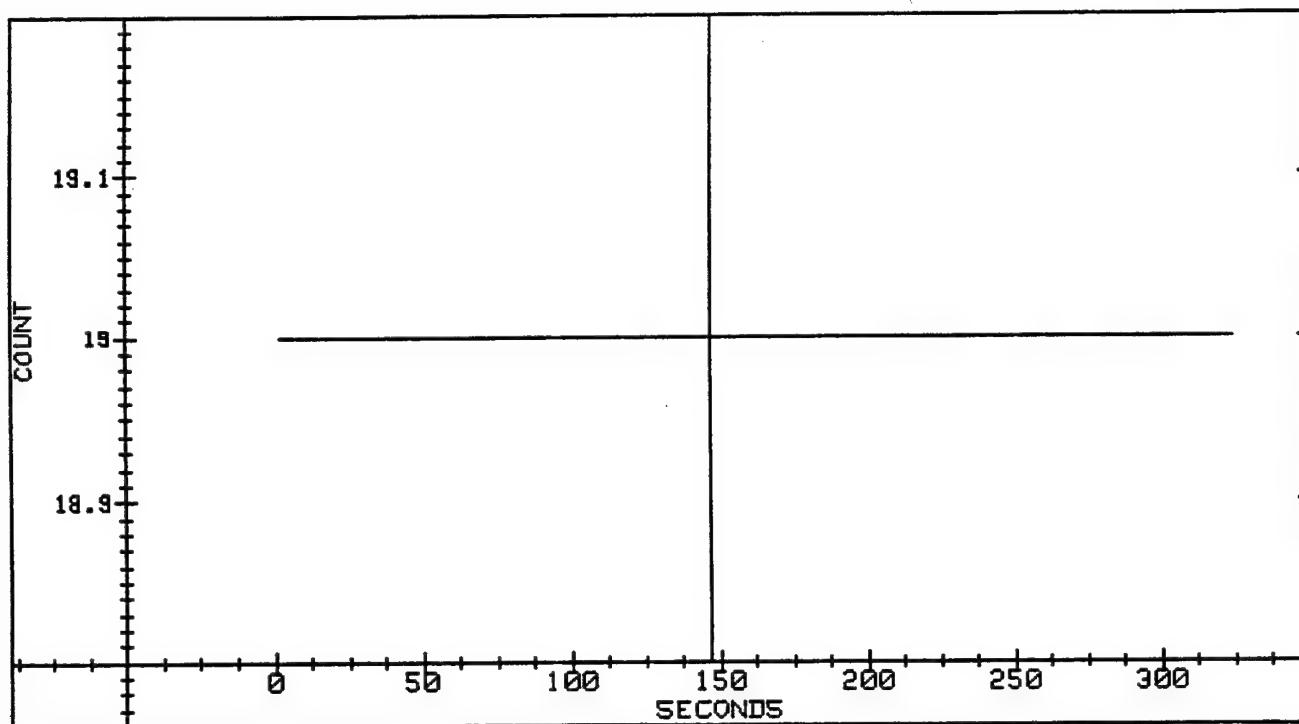
INS GROUND SPEED

DRY 178 TIME 1:10 PASS 19 m= 250.6, sd= 1.22162



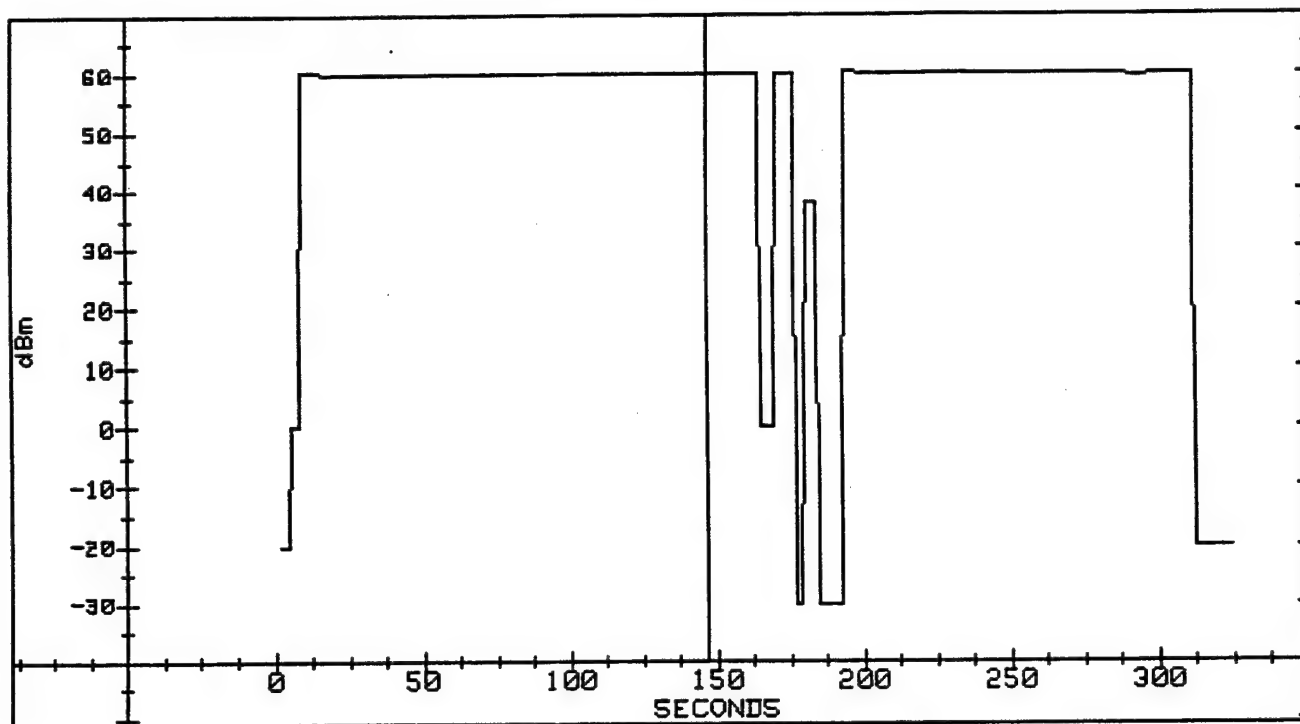
PASS NUMBER

DAY 178 TIME 1:10 PASS 19 m- 19, sd- 0



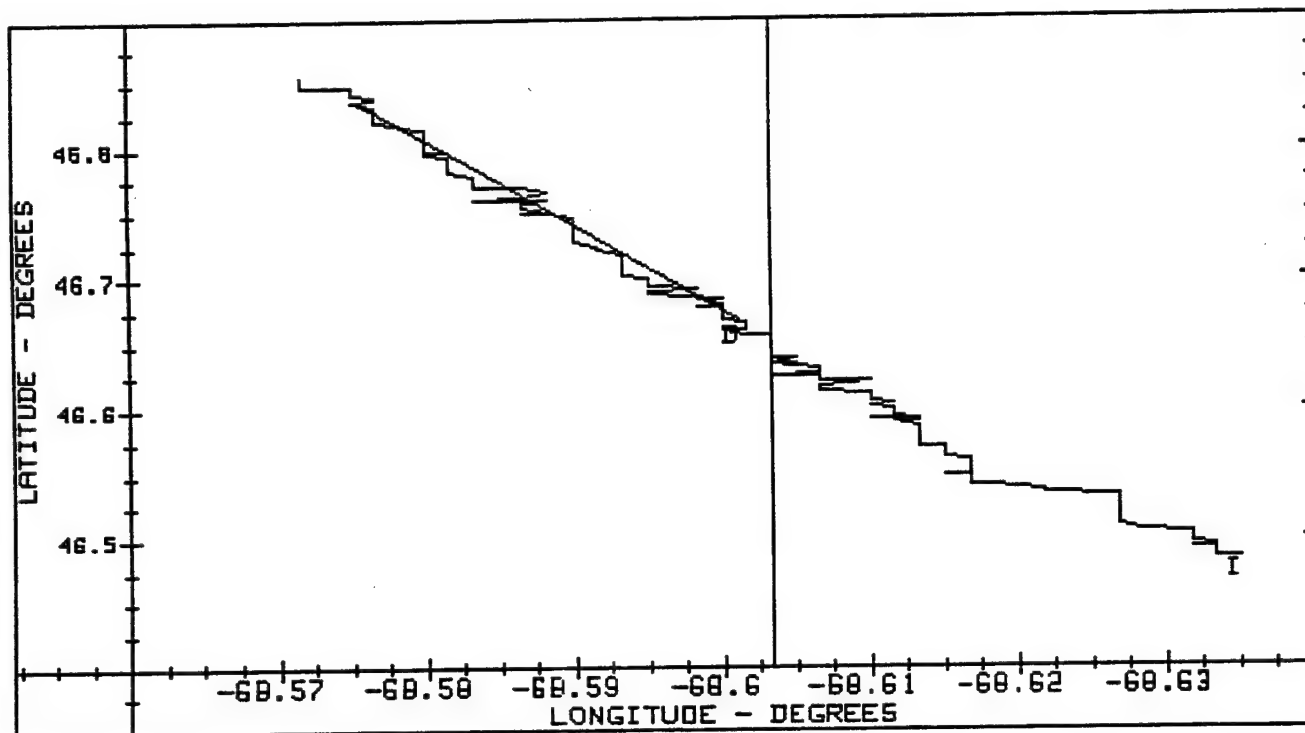
P Band Power

DRY 178 TIME 1:10 PRSS 19 m= 44.61, sd= 31.1090



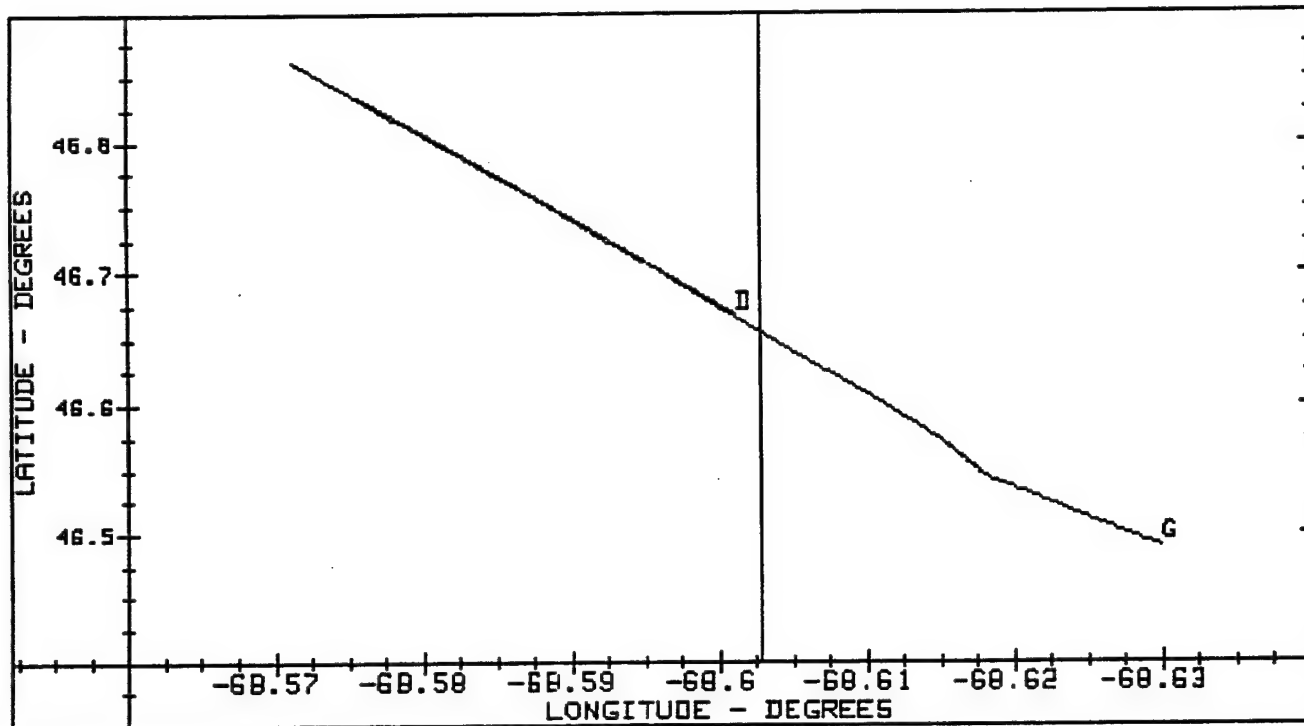
INS AIRCRAFT POSITION

DAY 178 TIME 1:10 PASS 19



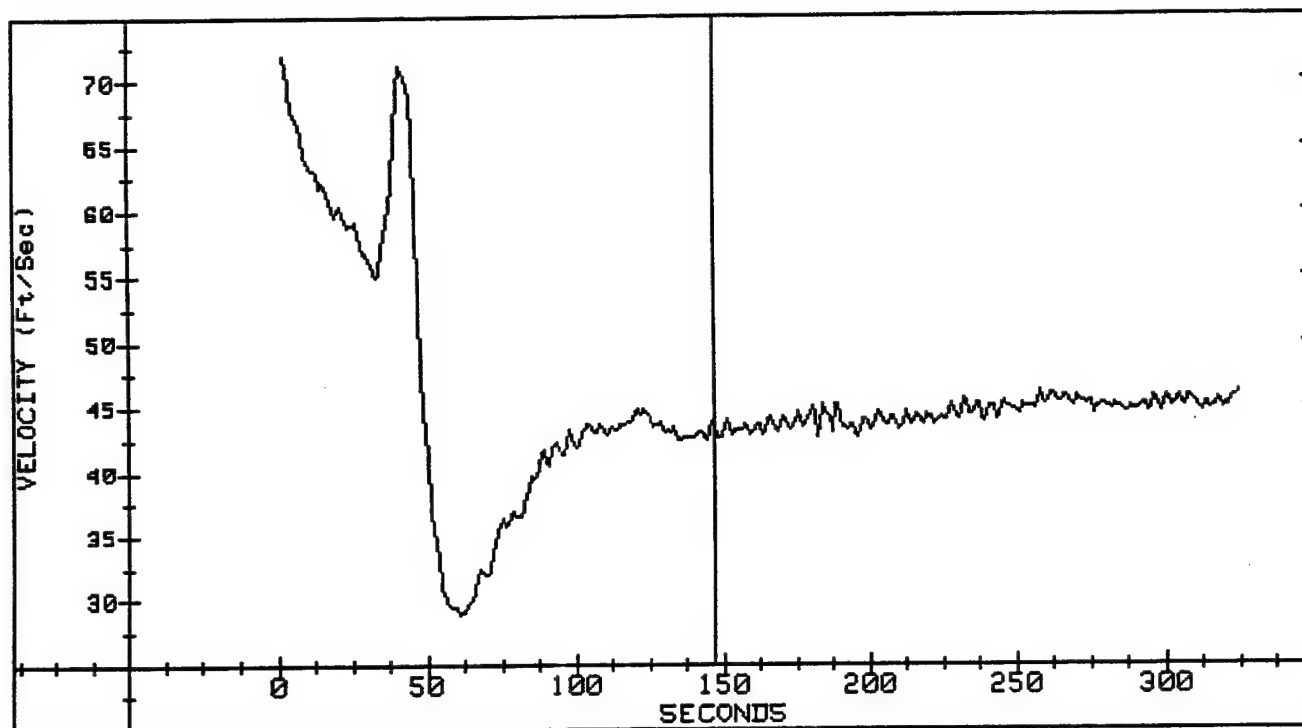
GPS AIRCRAFT POSITION

DAY 170 TIME 1:10 PASS 19



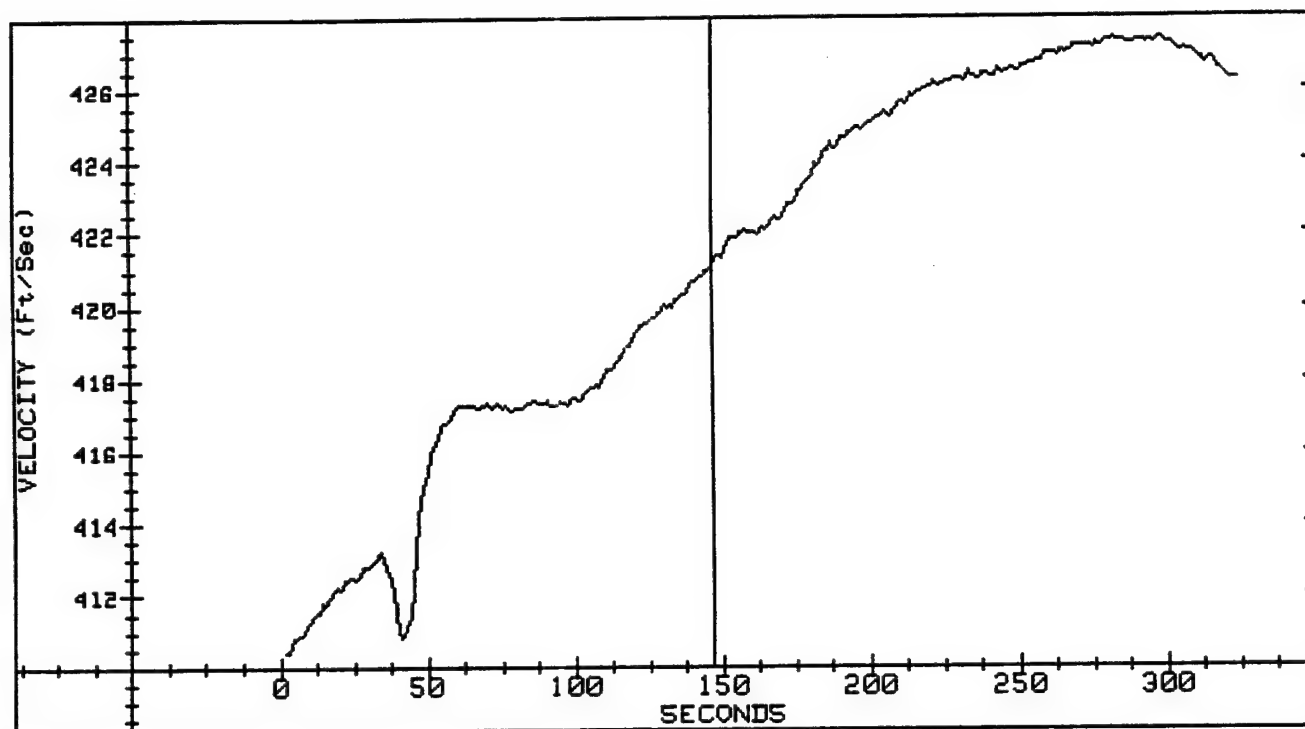
GPS V_e

DRY 178 TIME 1:10 PASS 19 m= 44.67, sd= .779652



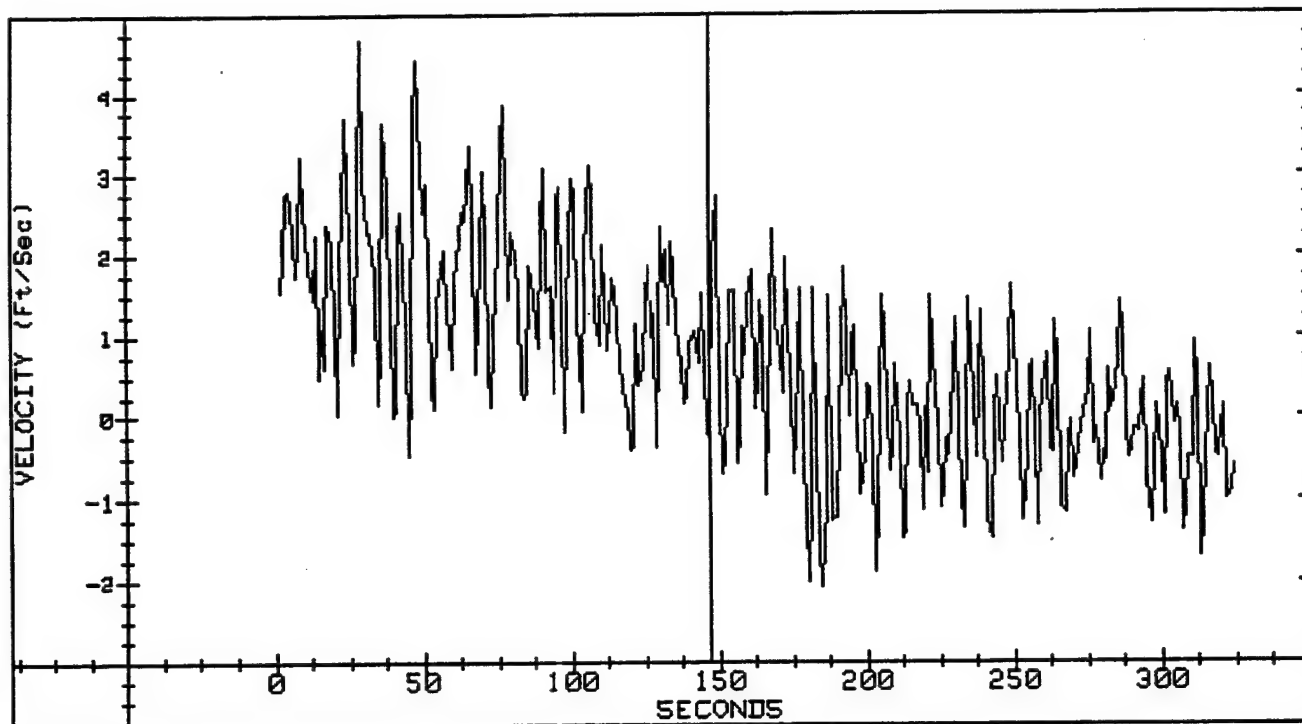
GPS Vn

DAY 17B TIME 1:10 PASS 19 m= 426, sd= 1.40154



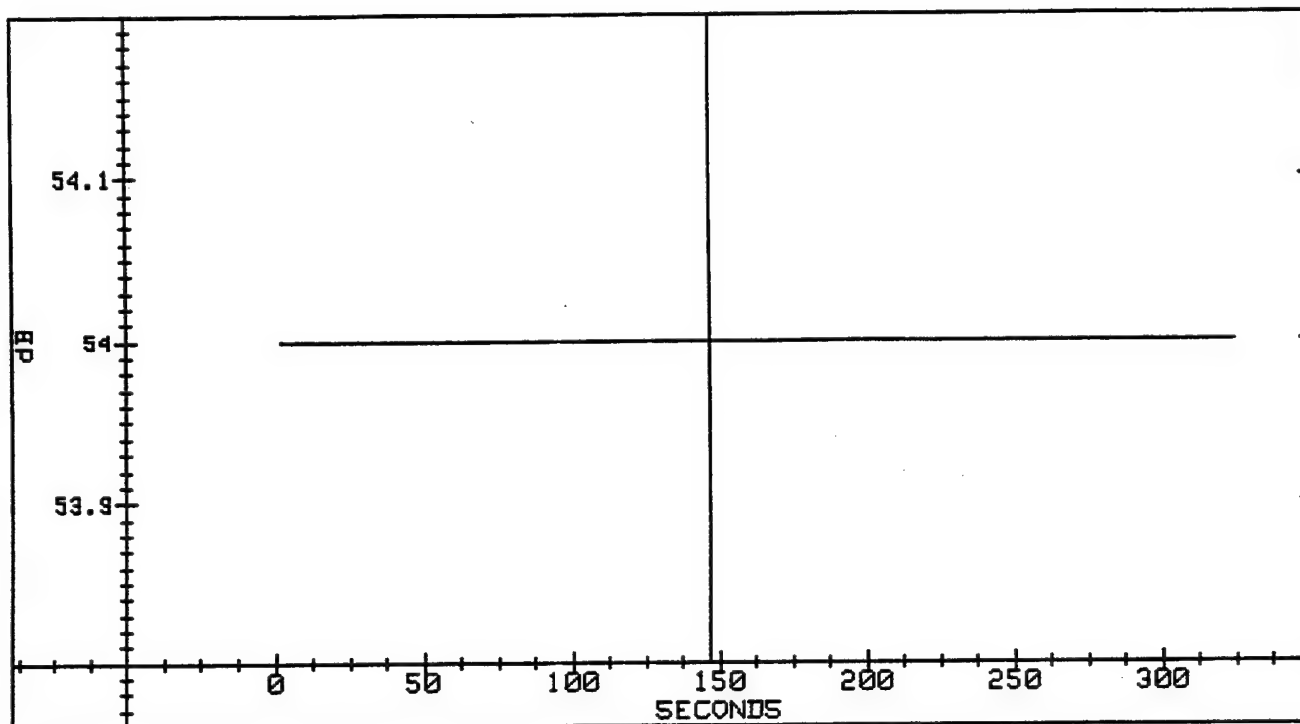
GPS Vv

DAY 178 TIME 1:10 PASS 19 $m = -.07949$, $sd = .071441$



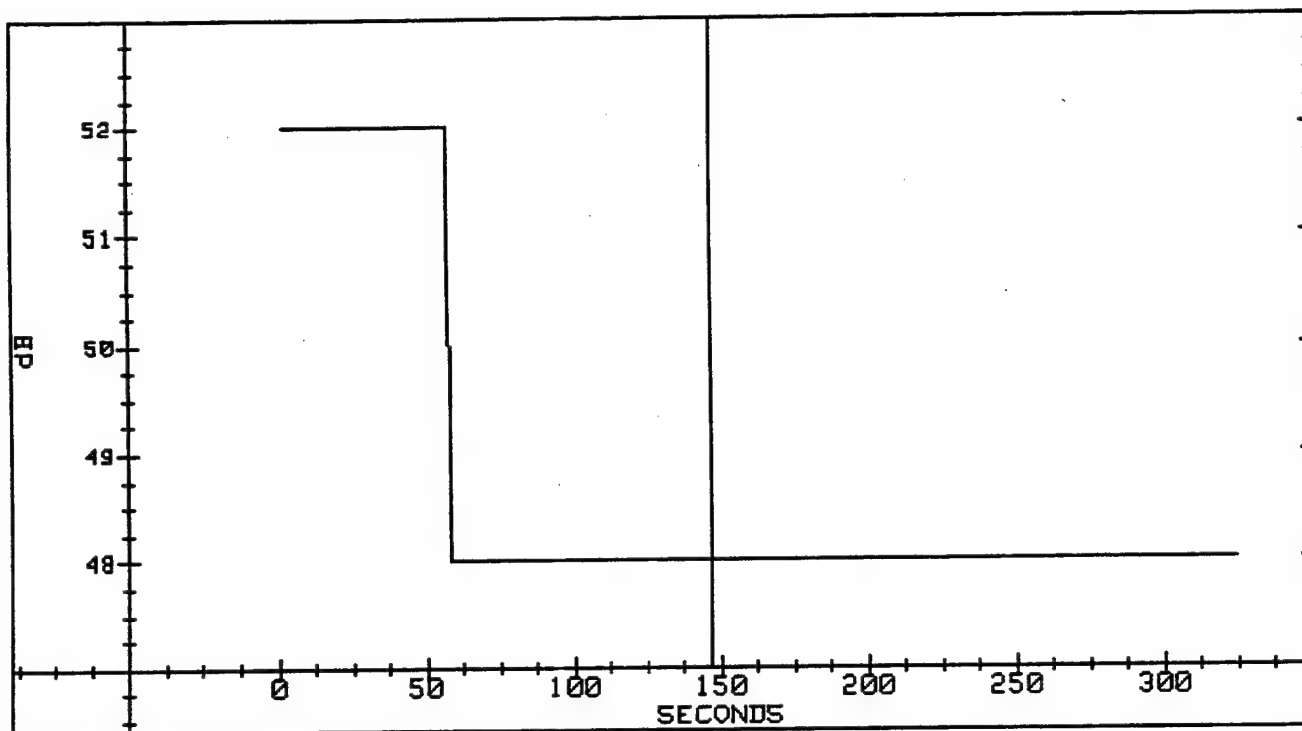
Ch1 RES Attenuation

DAY 178 TIME 1:10 PASS 19 m= 54. sd= 0



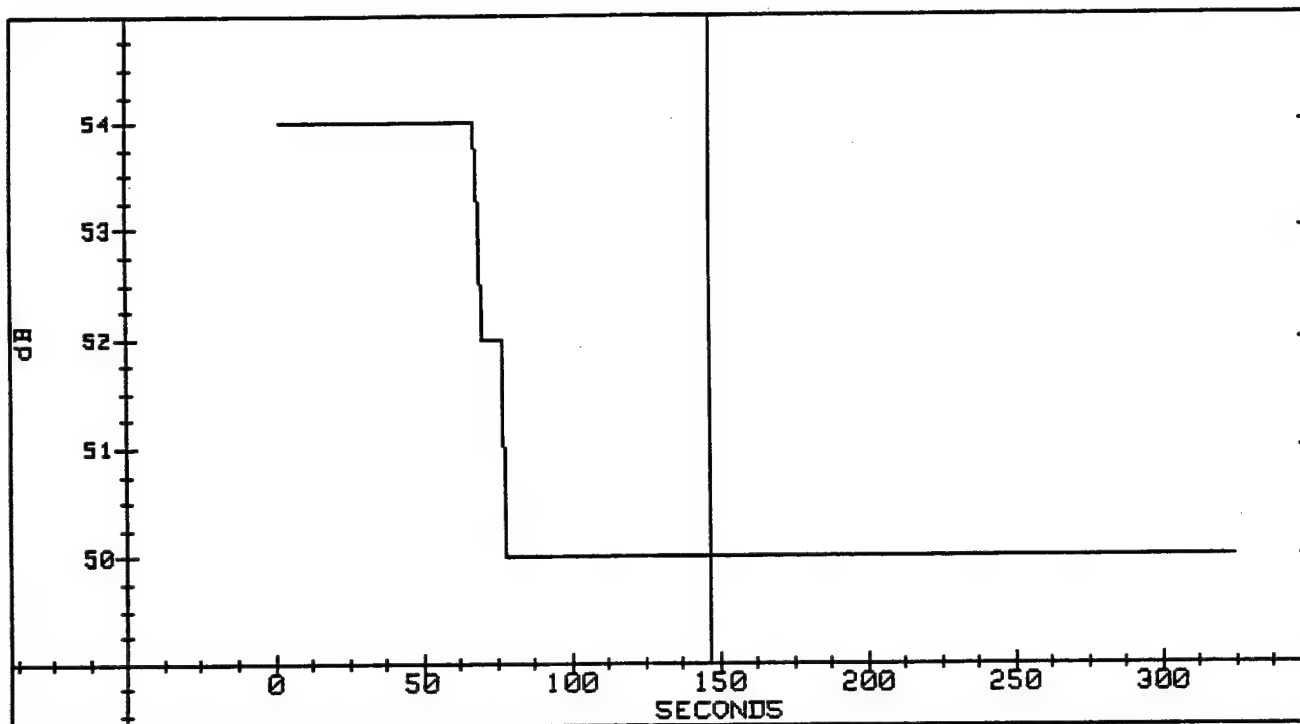
Ch2 RES Attenuation

DAY 178 TIME 1:10 PASS 19 m= 48, sd= 0



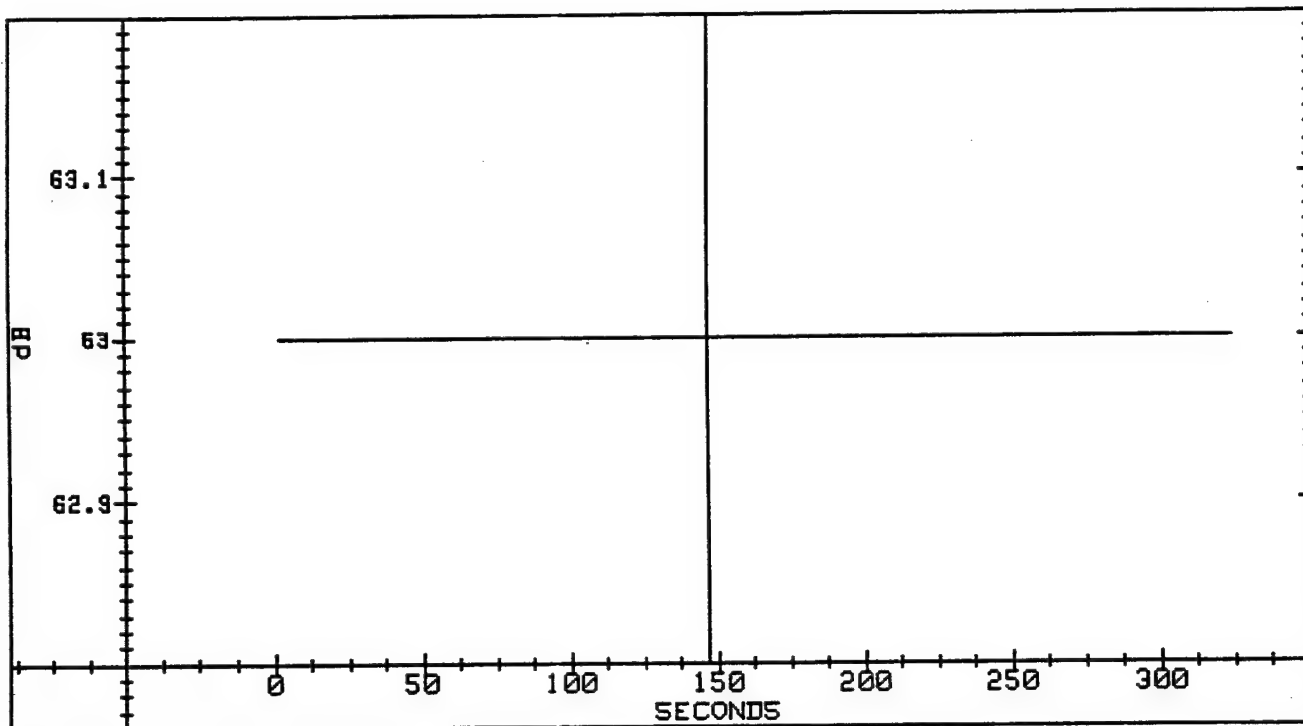
Ch3 RES Attenuation

DAY 170 TIME 1:10 PASS 19 m= 50, sd= 0



Ch4 RES Attenuation

DAY 178 TIME 1:10 PASS 19 m= 63, sd= 0

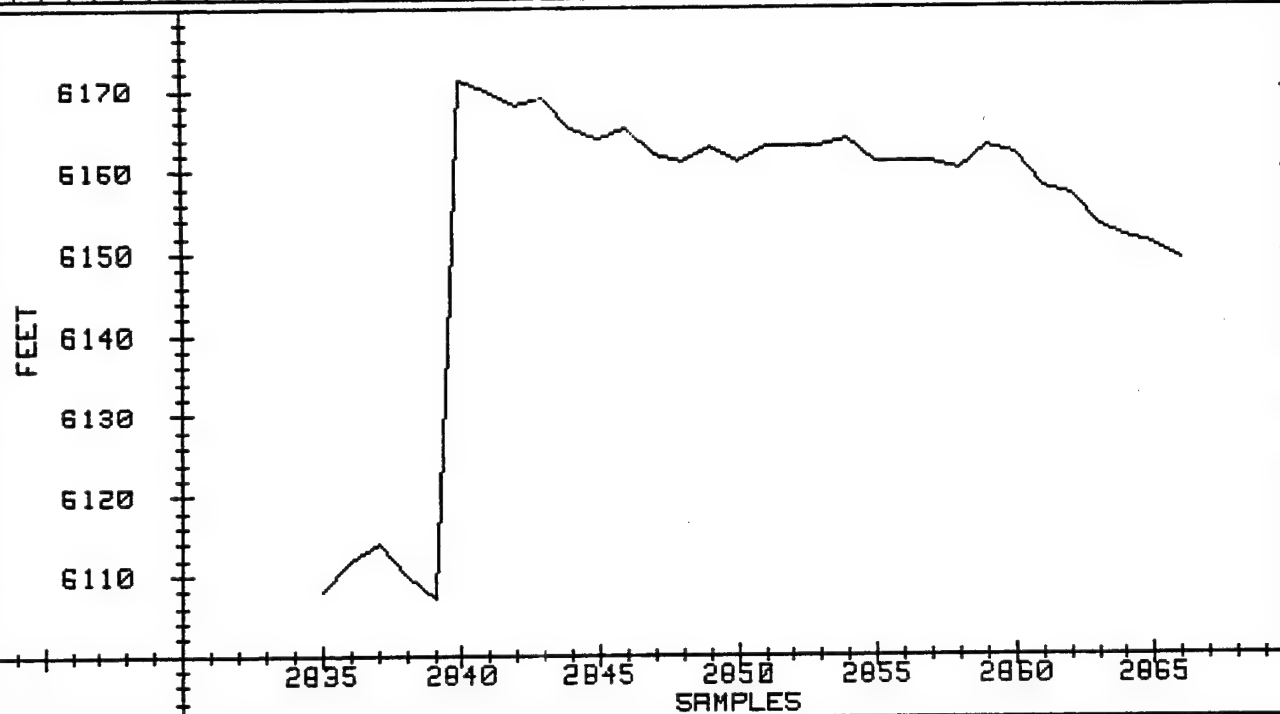


GPS ALTITUDE

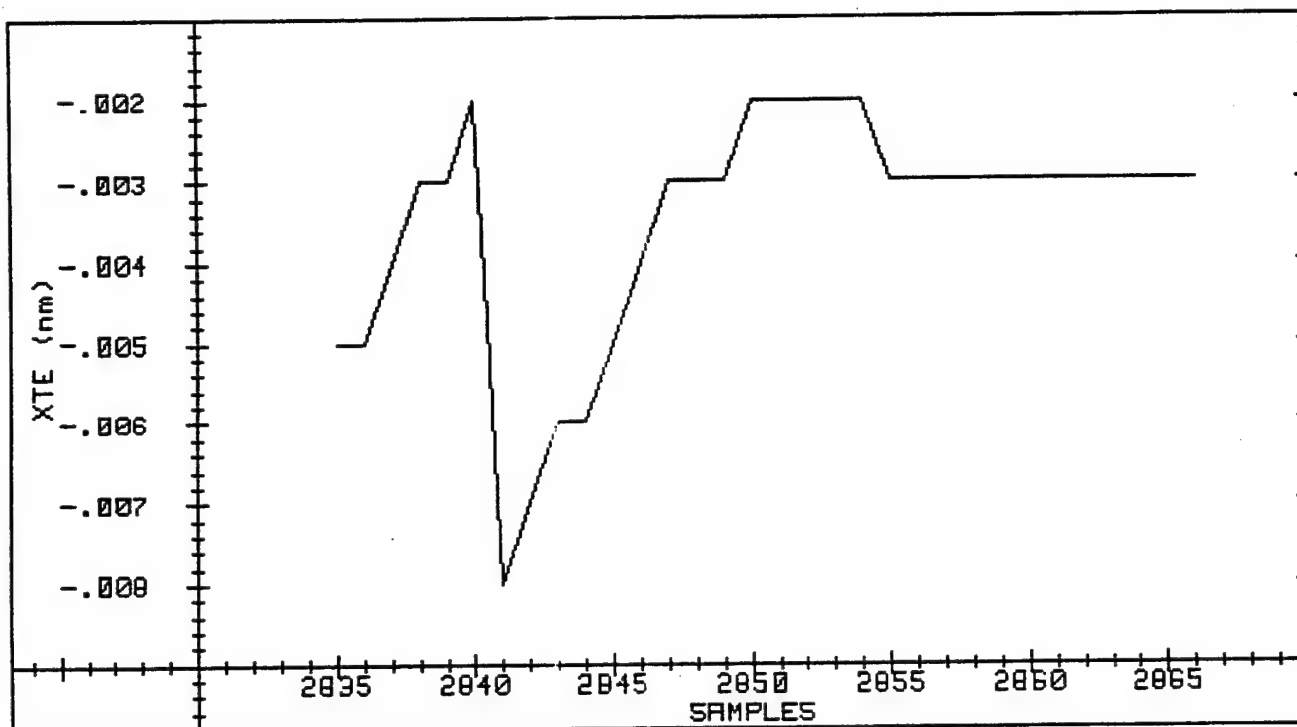
MEAN= 6153.47 STANDARD DEVIATION= 19.2857

DATE: June 26, 1995 PASS 19

OFF
ON
BAR



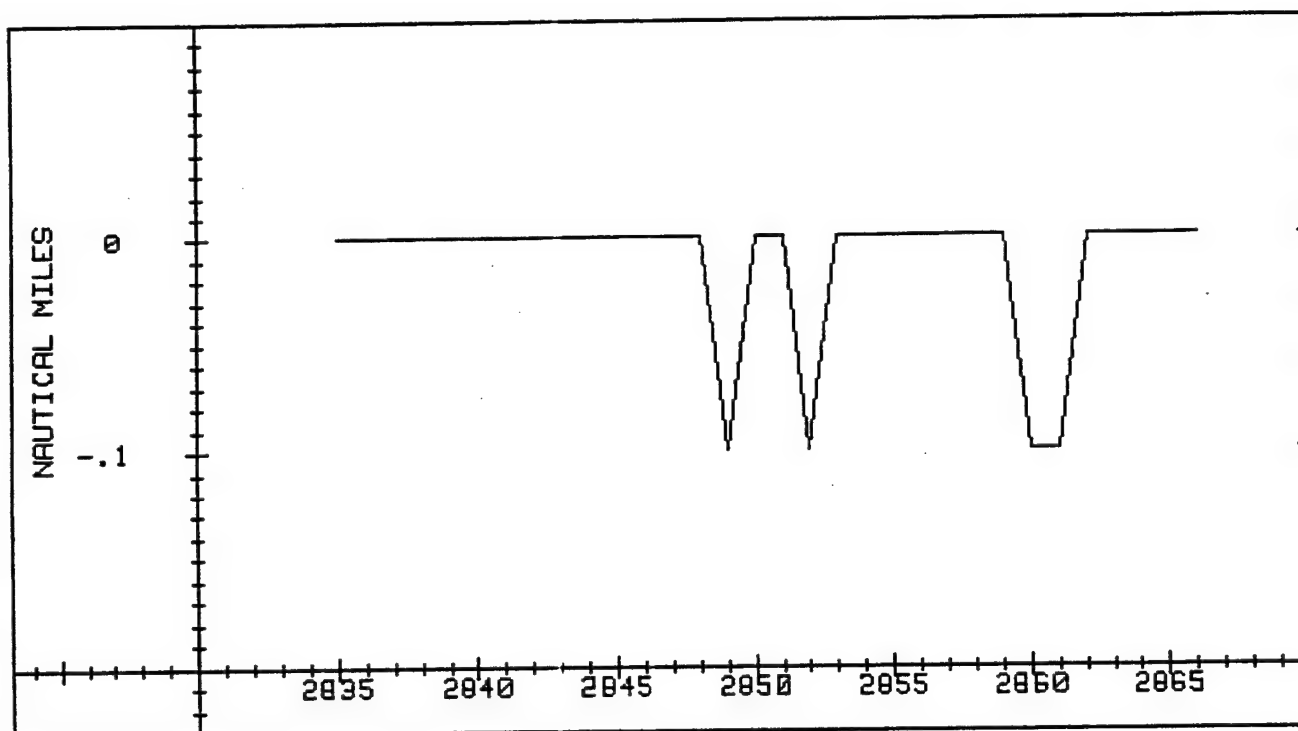
GPS Cross Track Error
MEAN= -.00353125 STANDARD DEVIATION= .00147869
DATE: June 26, 1995 PASS 19



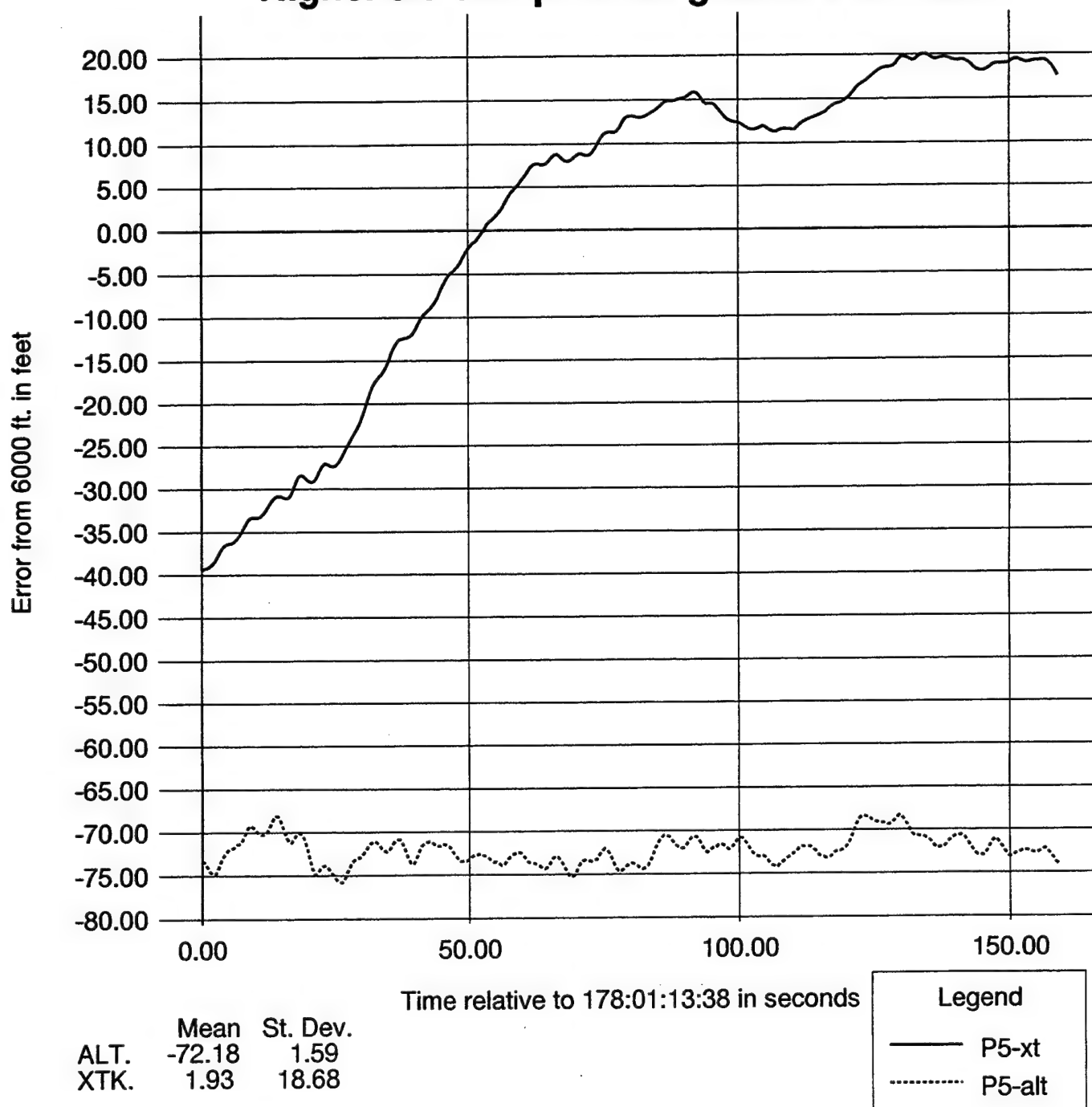
INS CROSS TRACK ERROR

MEAN- -.0125 STANDARD DEVIATION- .0330719

DATE: June 26, 1995 PASS 19



Portage, ME - June 26, 1995 - Pass 19 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 37
Mission: PORTAGE MAINE, DAY

Time: 178:01:24:19
Pass 20
Req.# 20

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	6000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	5833 ft s.d.=	1 Swath Ctr Ang:	15.0°	15.0°	15.0°	15.0°
Slt. rng:	20632 ft	Tgt Dep Ang:	15.0°	15.0°	15.0°	15.0°
Look:	Right	St rng (ft):	19097	19097	19097	19097
Depr Ang:	25.0°	Near Rng Dep:	17.8°	17.8°	17.8°	17.8°
Des. trk:	186.0°	Far Rng Dep:	9.5°	9.5°	9.5°	9.5°
Start Sq:	90.0°	Atten (dB):	51.0	48.0	50.0	63.0
End Sq:	90.0°	RMS Video (%FS)	18.7	24.1	15.4	9.5

WAYPOINTS

	Latitude	Longitude
Line up:	N 47:01.28	W 68:23.22
Start:	N 46:49.35	W 68:25.06
End:	N 46:39.41	W 68:26.58
From:	N 63:13.90	W 64:38.04
To:	N 30:07.15	W 70:24.80

Main Target: GP
Mocomp Point:
Lat: N 46:44.73
Long: W 68:30.56
Tgt Trk: 0.0 Tgt Vel: 0.0
Alt: 660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1
Resolution: N/A
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6
TX Chirp Filename: CTL1U2B

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts)
Ave Gndspd: Real -> 247.0 kts
Mocomp Off for Chnl 1, 2, 3, 4
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF
RX Chirp Filename: CRL1N0A

Ave Ref Vel -> -1.3 fps (s.d.= .4)
Ave Fil Vel -> -.8 fps (s.d.= .2)

NML XMIT PWR	ANT BIAS
X: -70.0	Elevation: 0.0°
L: -70.0	Azimuth: 0.0°
C: -70.0	Pitch: 0.0°
P: 46.9	

	Tape Footage	Drive no.
Starting:	3962 ft	(1)
Ending:	5206 ft	(1)

Vel Bias	CAL Atten
X: 1035.0	X: 63.8 dB
Y: -433.0	L: 63.8 dB
Z: 6697.0	C: 63.8 dB

LINE Map Time (UCT)
Start: 01:24:19
End: 01:27:01

Mocomp Counters

Start: 1198955 00124B6Bh
End: 1200623 001251EFh

CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 37
Mission: PORTAGE MAINE, DAY

Time: 178:01:24:28
Pass 21
Req.# 20

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	6000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	5828 ft s.d.=	4 Swath Ctr Ang:	15.0°	15.0°	15.0°	15.0°
Slt. rng:	20632 ft	Tgt Dep Ang:	15.0°	15.0°	15.0°	15.0°
Look:	Right	St rng (ft):	19097	19097	19097	19097
Depr Ang:	25.0°	Near Rng Dep:	17.8°	17.8°	17.8°	17.8°
Des. trk:	186.0°	Far Rng Dep:	9.5°	9.5°	9.5°	9.5°
Start Sq:	90.0°	Atten (dB):	51.0	48.0	50.0	61.0
End Sq:	90.0°	RMS Video (%FS)	18.4	22.1	15.7	9.3

WAYPOINTS

Line up:	N 47:01.28	W 68:23.22	Main Target:	GP
Start:	N 46:49.35	W 68:25.06	Mocomp Point:	
End:	N 46:39.41	W 68:26.58	Lat:	N 46:44.73
			Long:	W 68:30.56
From:	N 63:13.90	W 64:38.04	Tgt Trk:	0.0
To:	N 30:07.15	W 70:24.80	Tgt Vel:	0.0
			Alt:	660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1
Resolution: N/A
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6
TX Chirp Filename: CTL1U2B

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts) -
Ave Gndspd: Real -> 243.7 kts
Mocomp Off for Chnl 1, 2, 3, 4
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF
RX Chirp Filename: CRL1N0A

Ave Ref Vel -> -1.8 fps (s.d.= .7)
Ave Fil Vel -> -1.4 fps (s.d.= .5)

NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation: 0.0°	Starting: 3962 ft	(1)
L: -70.0	Azimuth: 0.0°	Ending: 5206 ft	(1)
C: -70.0	Pitch: 0.0°		
P: 46.8			

Vel Bias	CAL Atten
X: 1035.0	X: 63.8 dB
Y: -433.0	L: 63.8 dB
Z: 6697.0	C: 63.8 dB

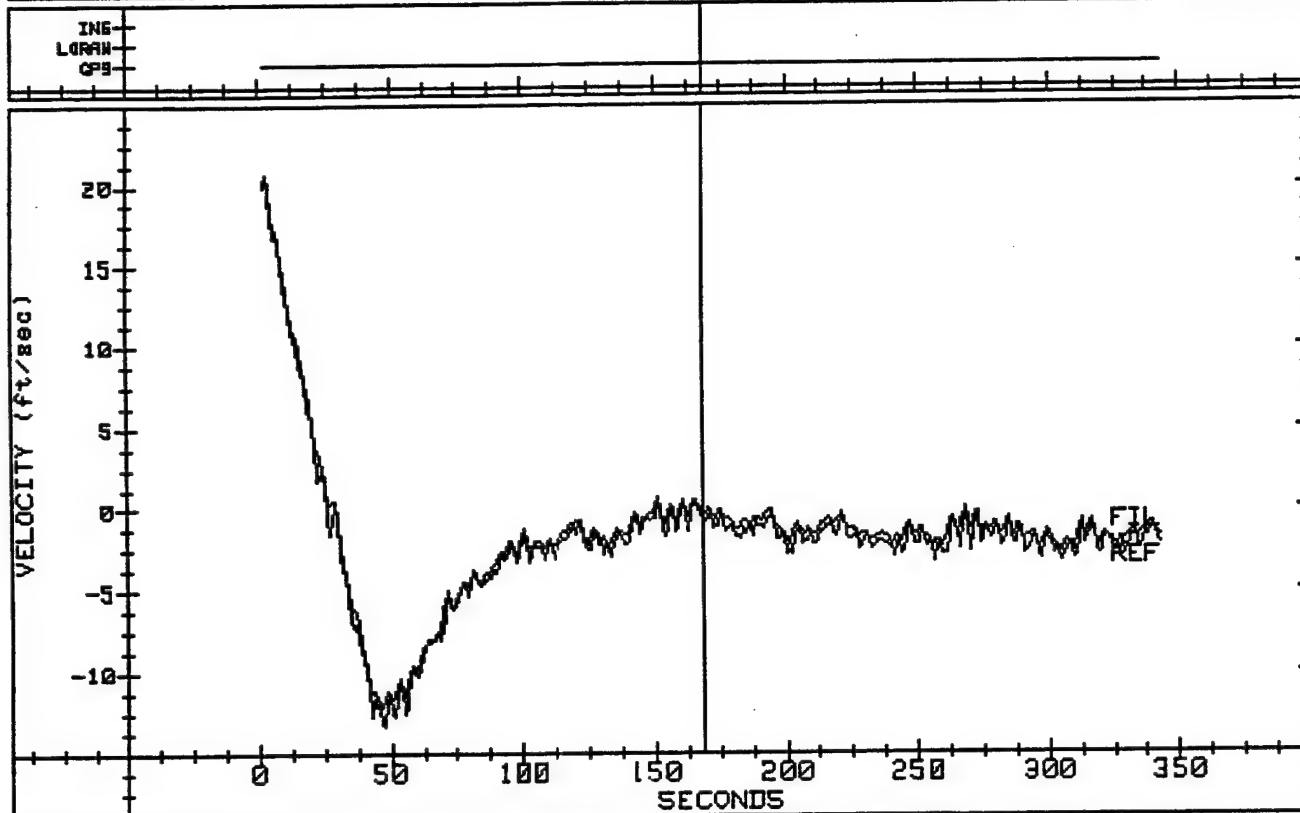
LINE Map Time (UCT)
Start: 01:24:28
End: 01:27:01

Mocomp Counters

Start: 1200623 001251EFh
End: 1226131 0012B593h

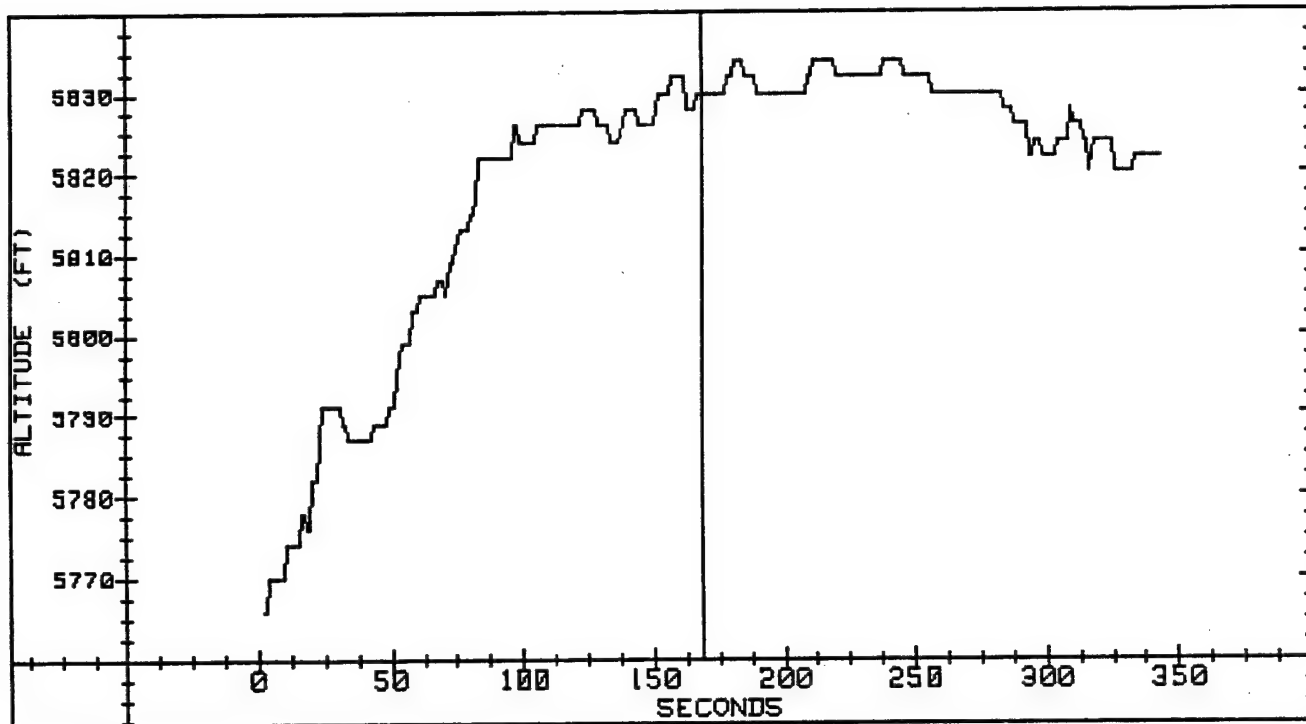
CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 170 TIME 1:21 PASS 20



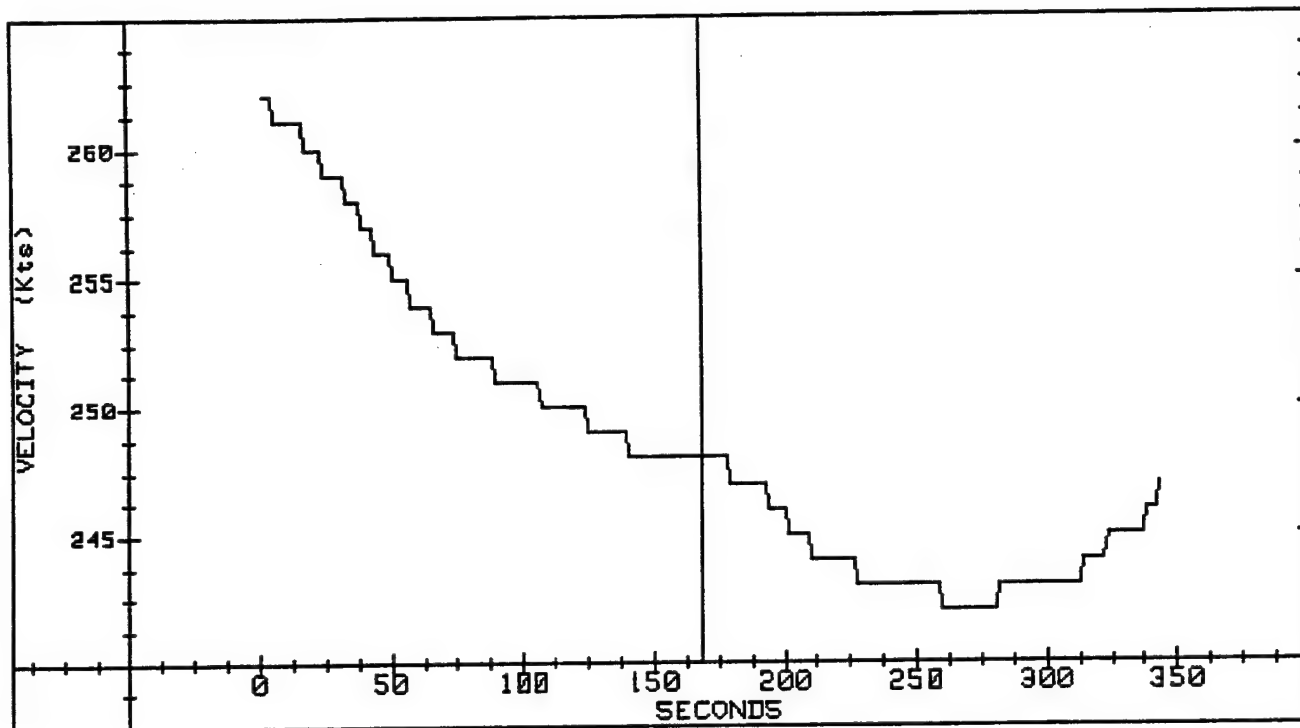
BARO ALTITUDE

DAY 17B TIME 1:21 PASS 20 m= 5829, sd= 4.3446



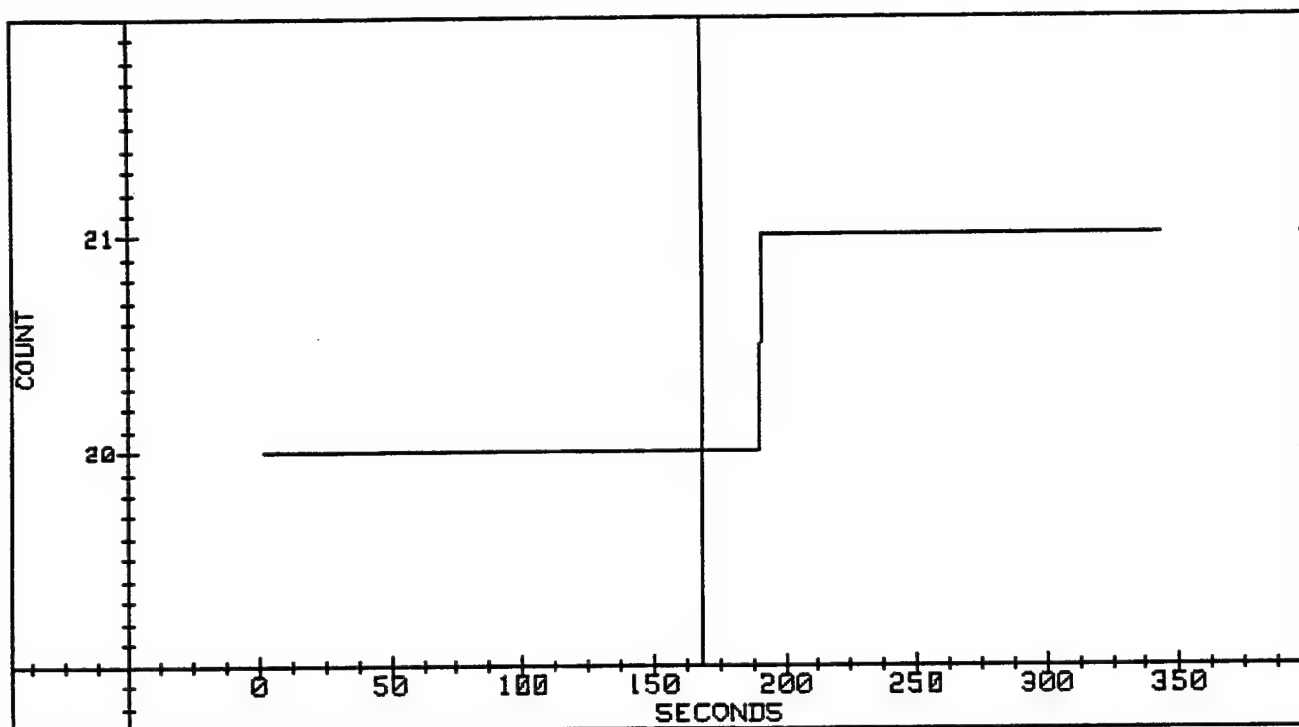
INS GROUND SPEED

DAY 178 TIME 1:21 PASS 20 m= 243.9, sd= 1.46118



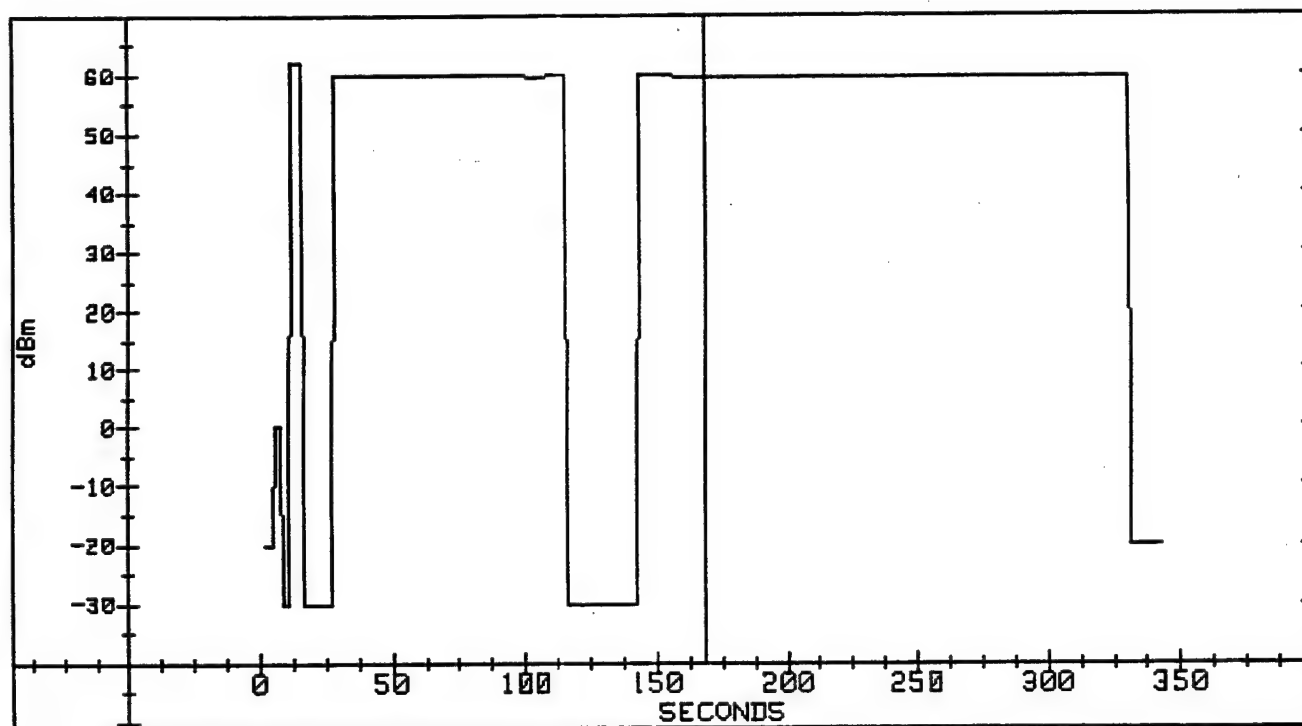
PASS NUMBER

DAY 170 TIME 1:21 PASS 20 m= 20.94, sd= .239971



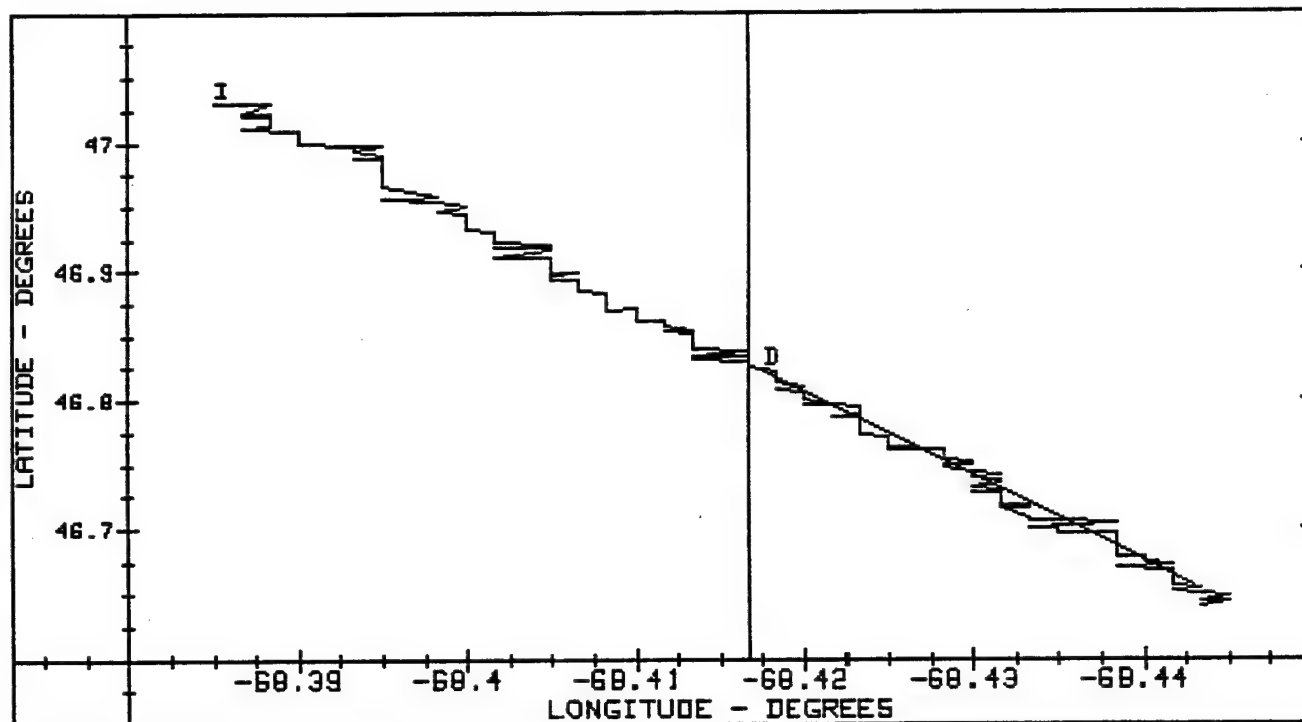
P Band Power

DAY 178 TIME 1:21 PASS 20 m= 53.23, sd= 21.5506



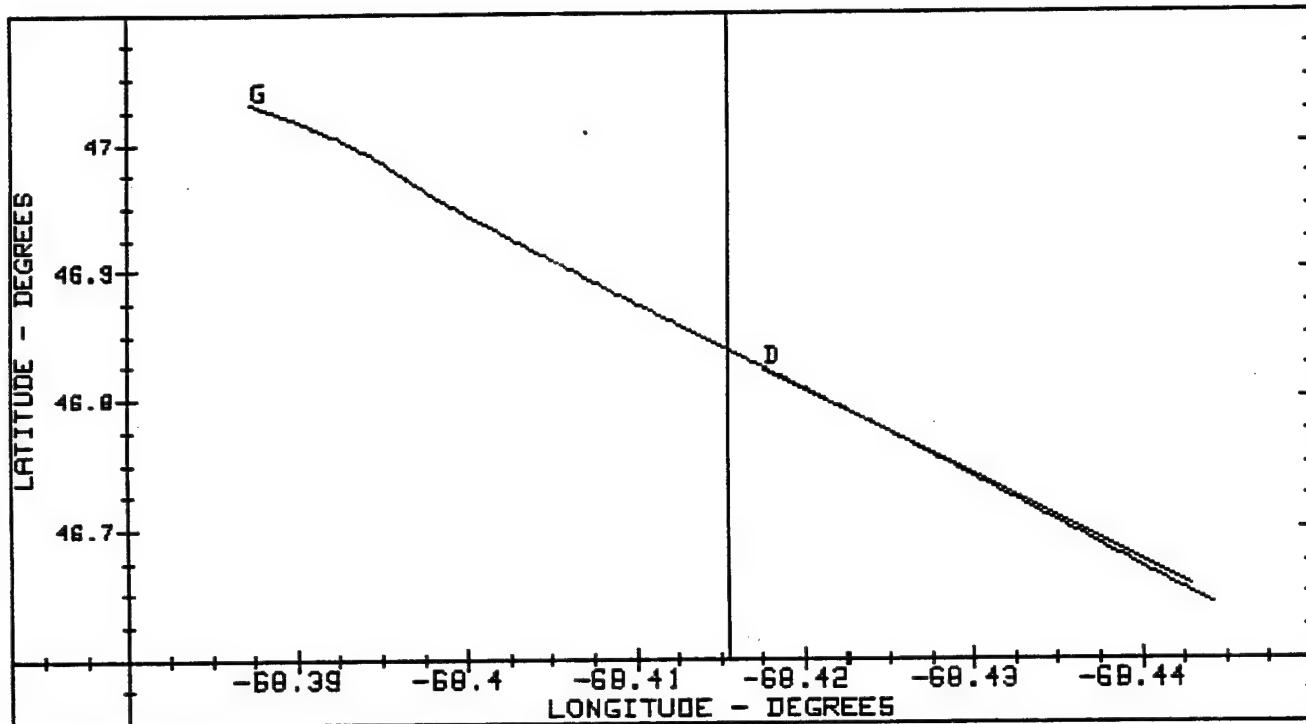
INS AIRCRAFT POSITION

DAY 170 TIME 1:21 PASS 20



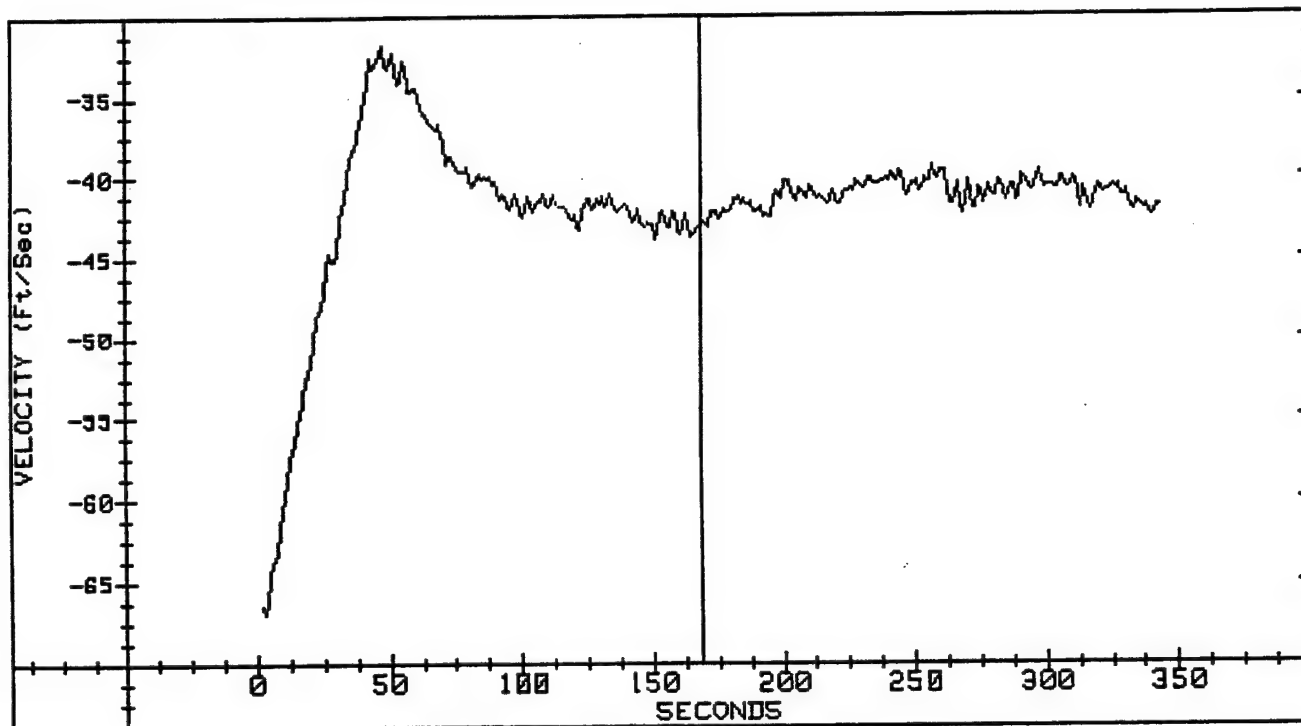
GPS AIRCRAFT POSITION

DAY 170 TIME 1:21 PASS 20



GPS Vc

DAY 170 TIME 1:21 PASS 20 m= -40.90, sd= .607791



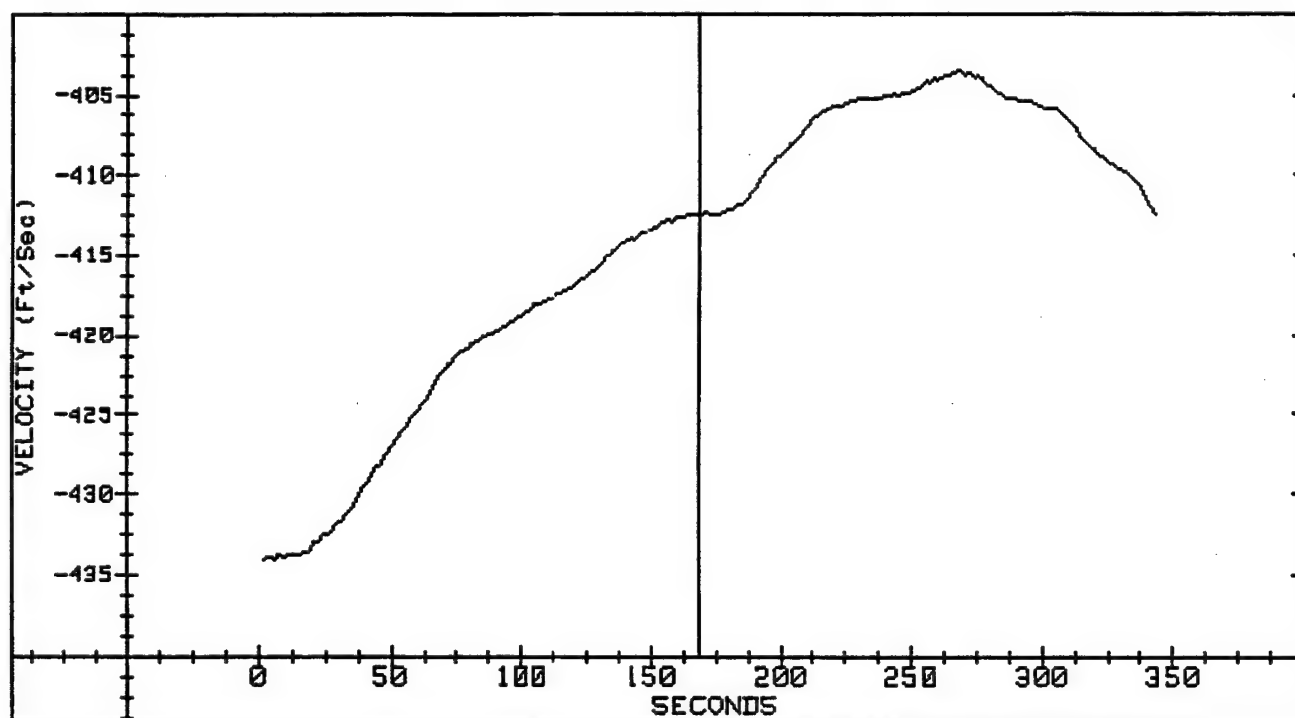
GPS Vn

DAY 170

TIME 1:21

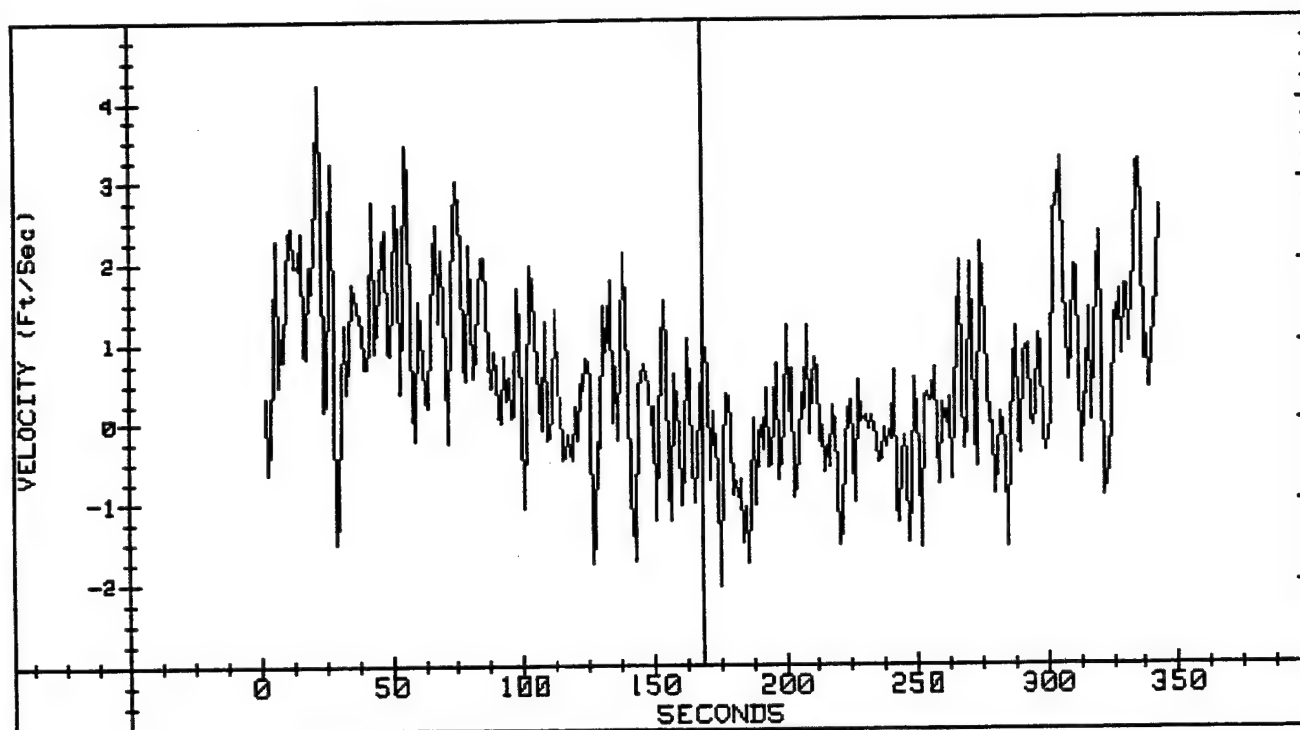
PASS 20

m= -406.0, sd= 2.48451



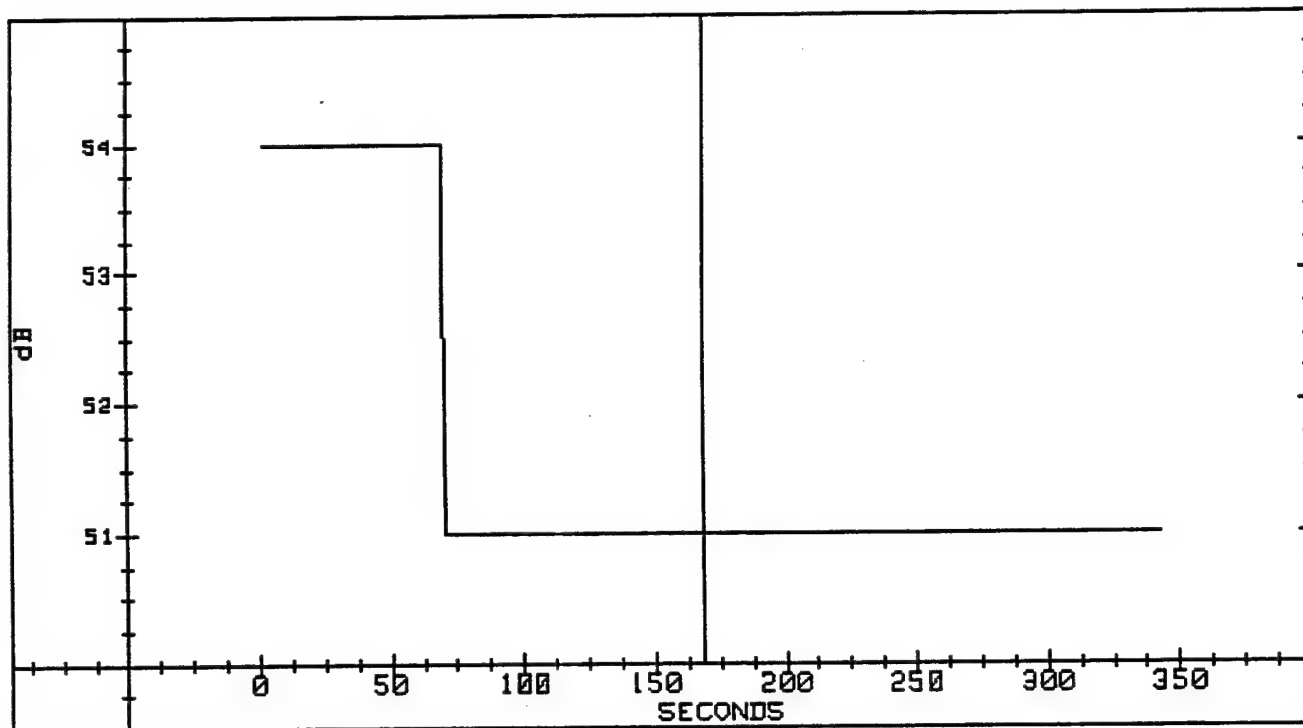
GPS Vv

DAY 178 TIME 1:21 PASS 20 m= .31, sd= 1.03601



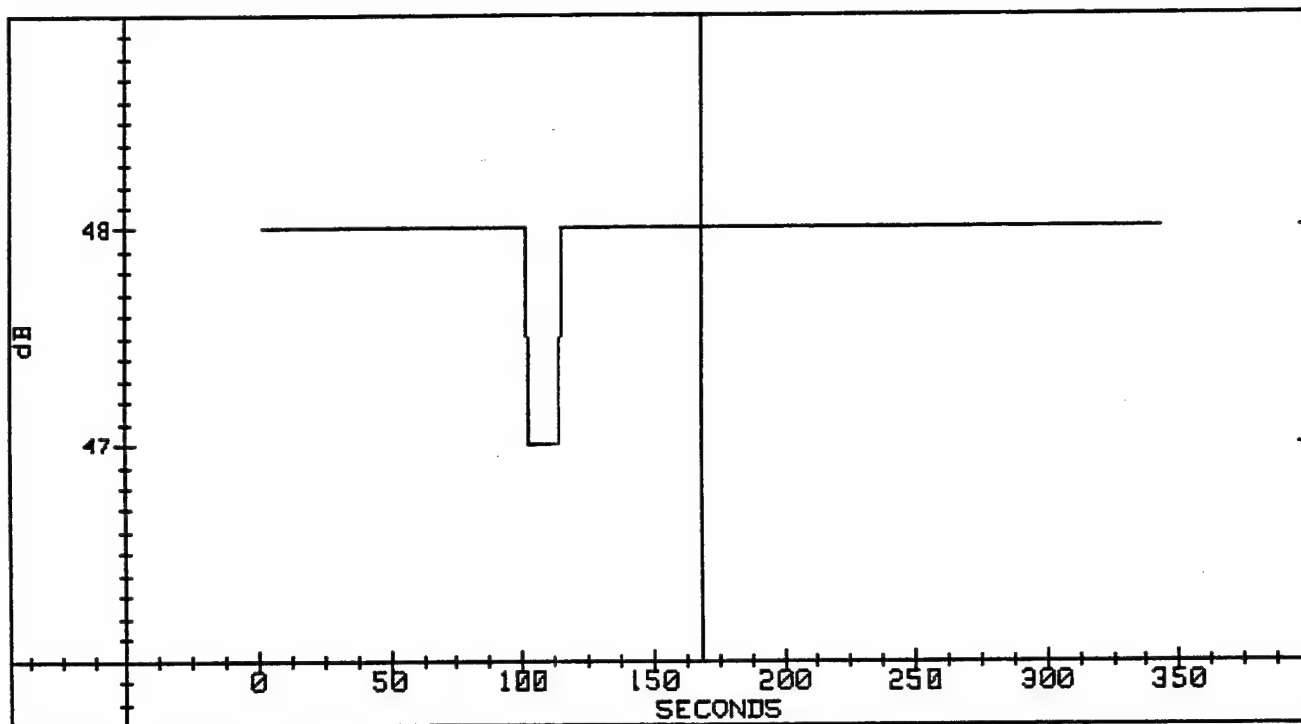
Ch1 RES Attenuation

DAY 170 TIME 1:21 PASS 20 m= 51, sd= 0



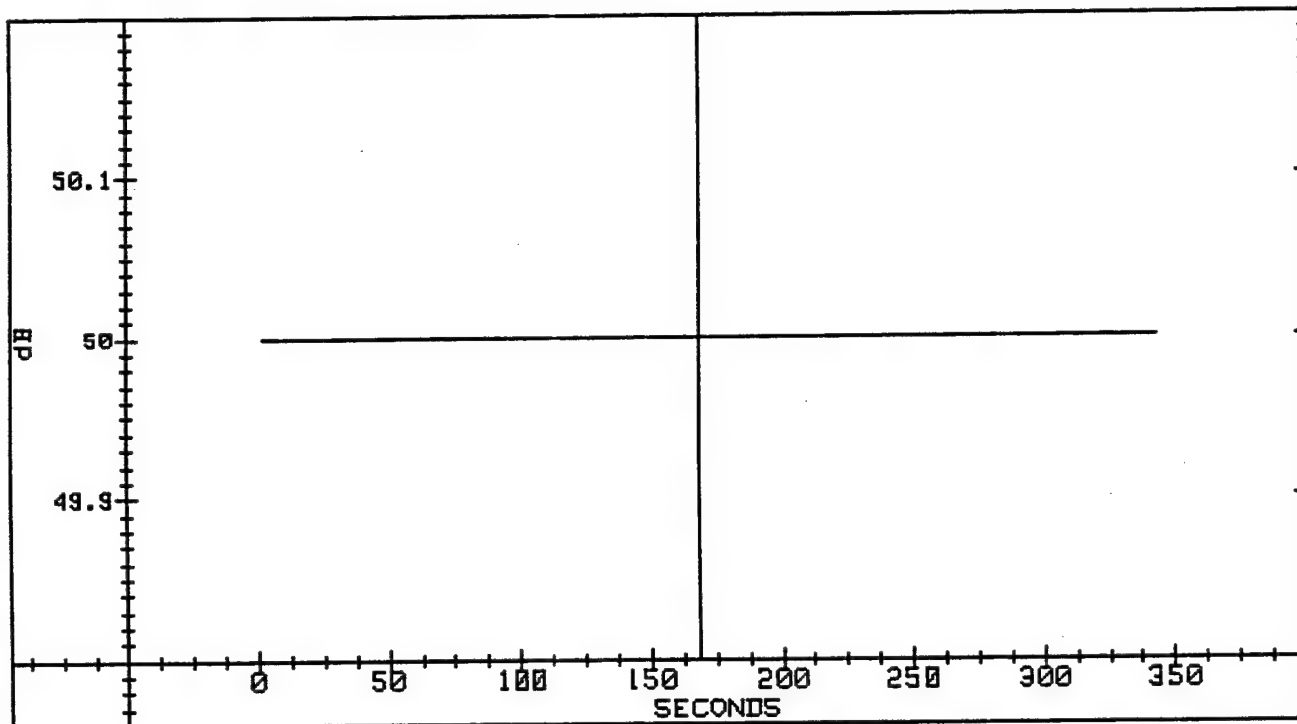
Ch2 RES Attenuation

DAY 170 TIME 1:21 PASS 20 m= 48, sd= 0



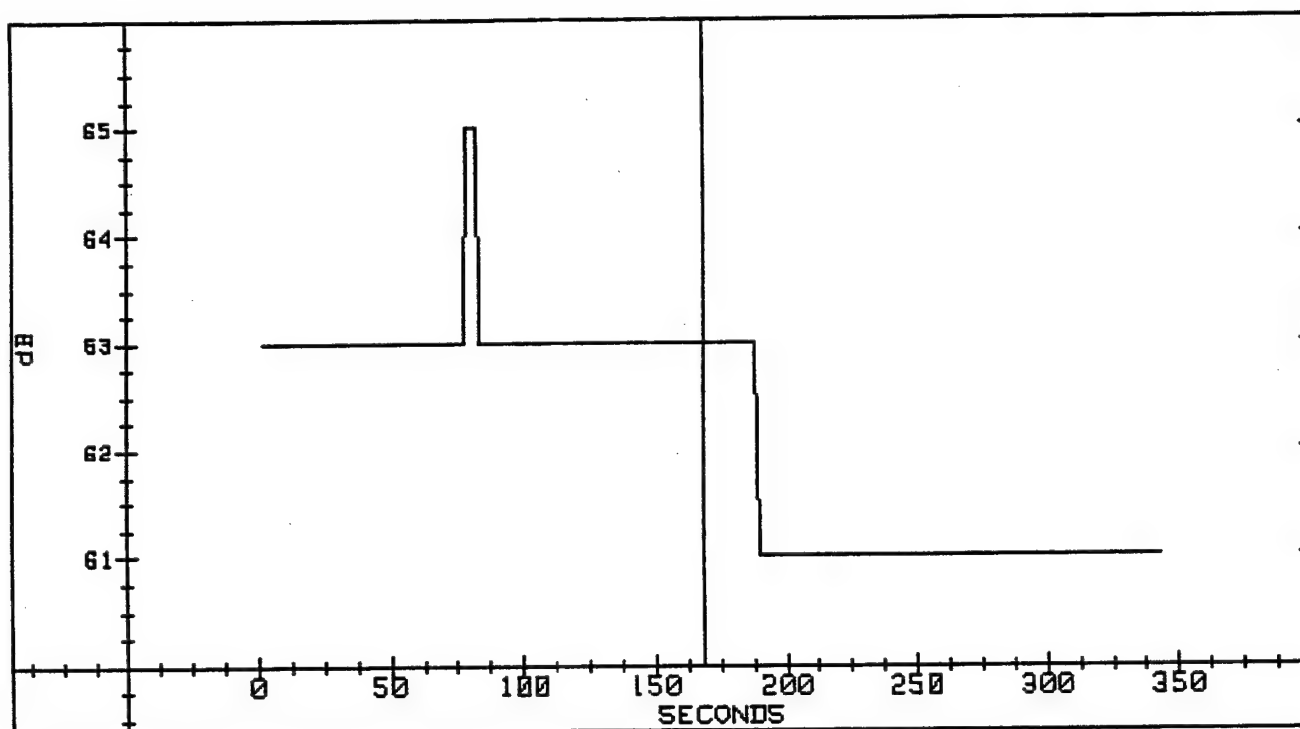
Ch3 RES Attenuation

DAY 170 TIME 1:21 PASS 20 m= 50, sd= 0



Ch4 RES Attenuation

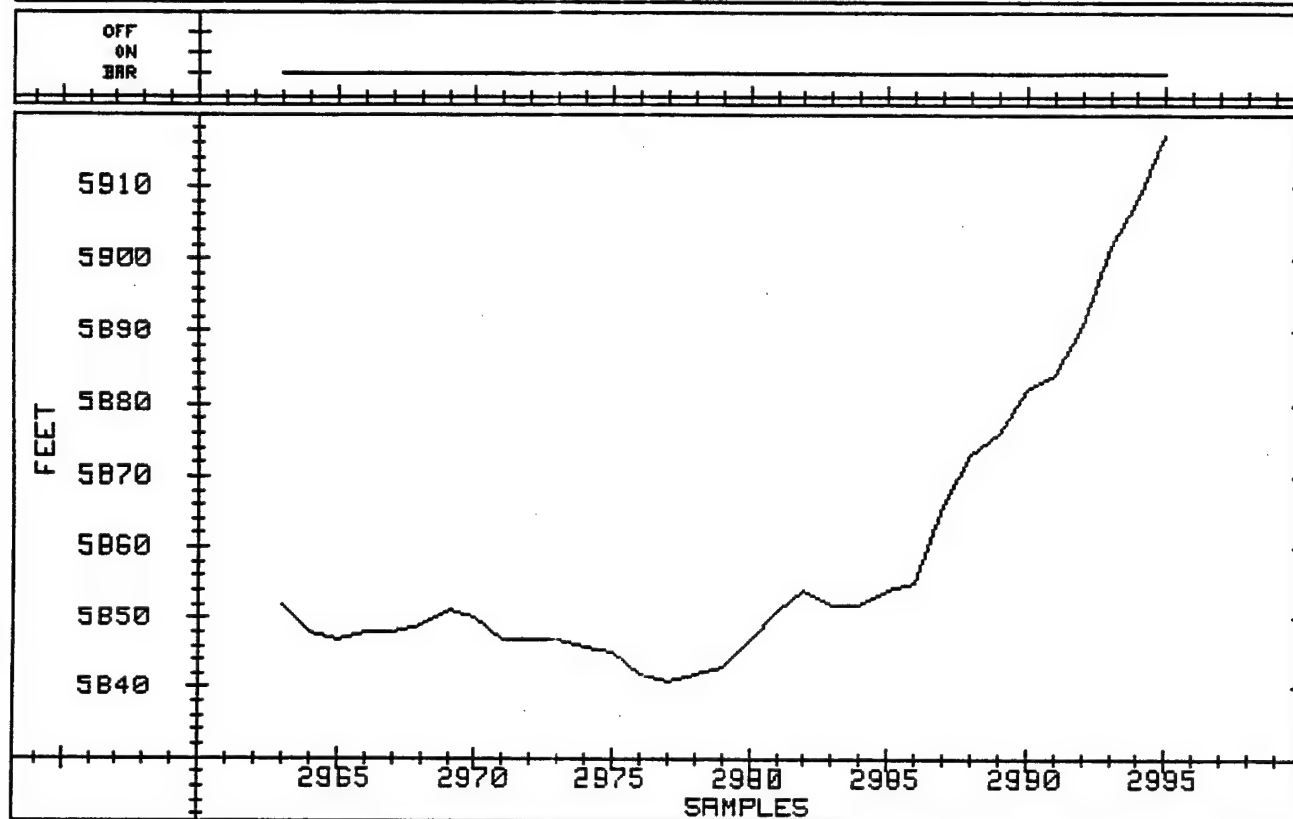
DAY 170 TIME 1:21 PASS 20 m= 61.1, sd= .437695



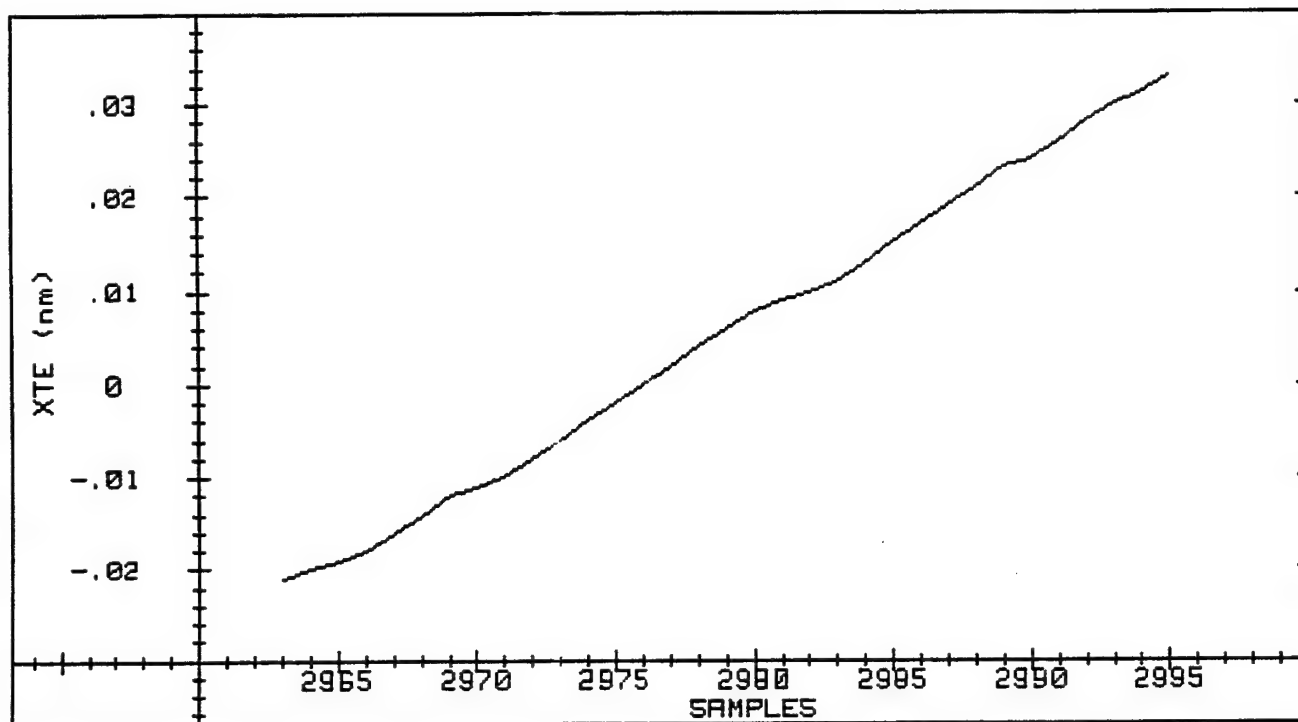
GPS ALTITUDE

MEAN= 5859.3 STANDARD DEVIATION= 20.1852

DATE: June 26, 1995 PASS 20

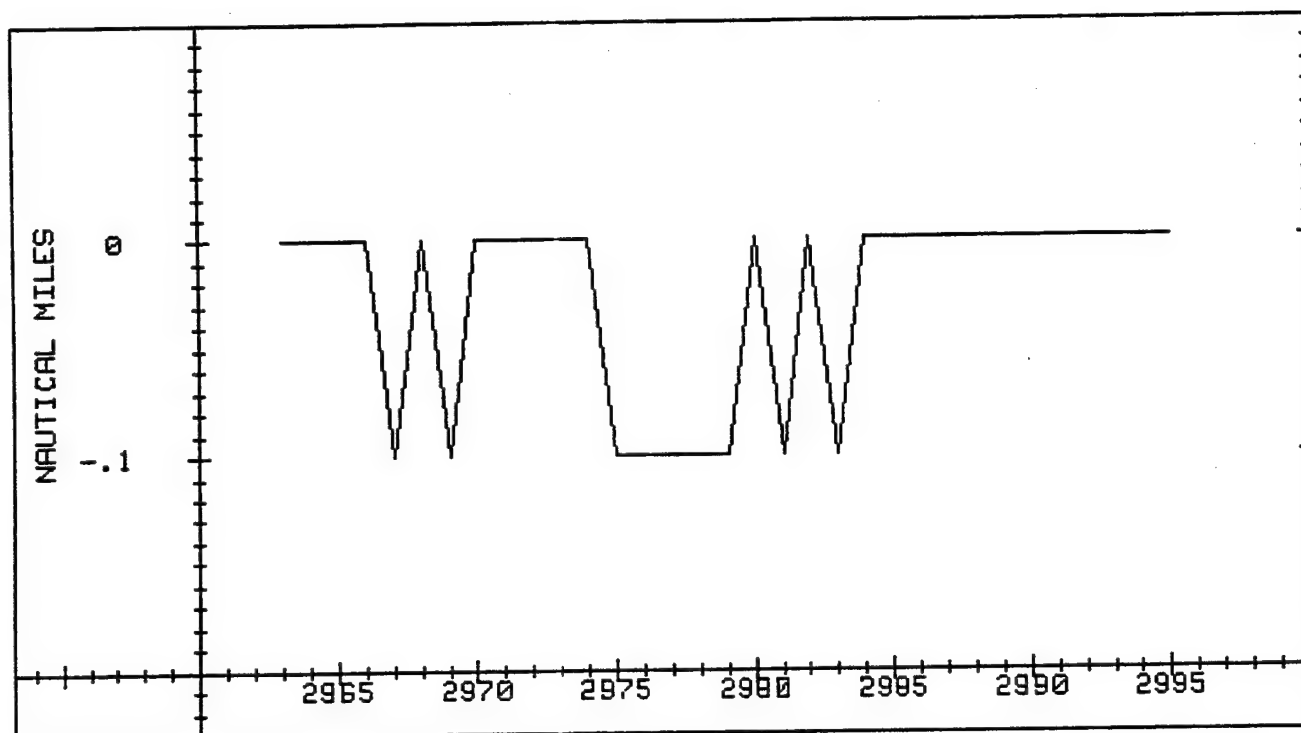


GPS Cross Track Error
MEAN= .00512121 STANDARD DEVIATION= .0165324
DATE: June 26, 1995 PASS 20

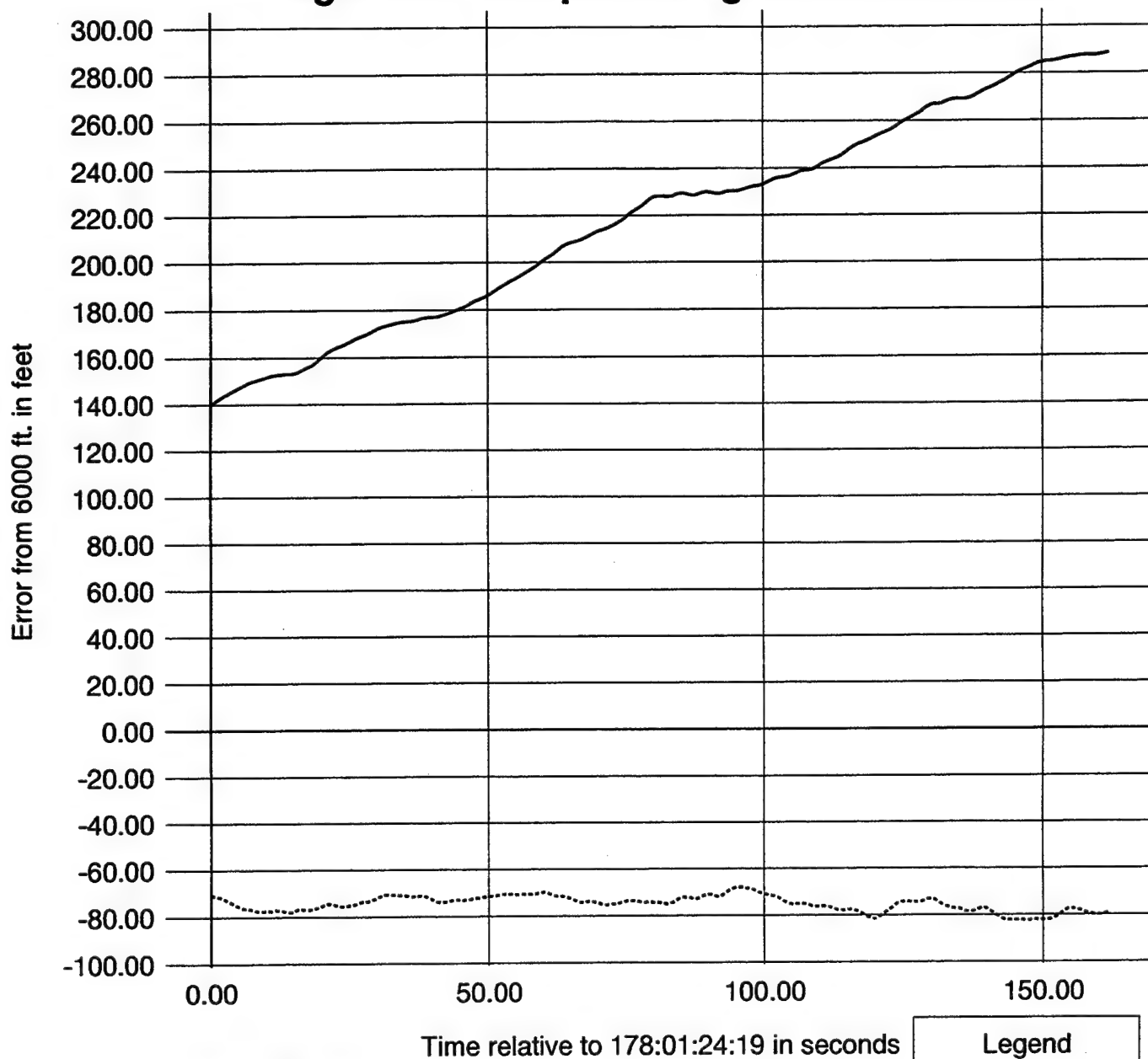


MEAN= -.0272727 STANDARD DEVIATION= .0445362
DATE: June 26, 1995 PASS 20

MEAN= -.0272727 STANDARD DEVIATION= .0445362
DATE: June 26, 1995 PASS 20



Portage, ME - June 26, 1995 - Pass 20 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



	Mean	St. Dev.
ALT.	-74.90	3.46
XTK.	218.50	44.01

Legend	
—	P5-xt
.....	P5-alt

27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 39
Mission: PORTAGE MAINE, DAY

Time: 178:01:35:52
Pass 22
Req.# 21

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	6000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	5846 ft s.d.=	3 Swath Ctr Ang:	15.0°	15.0°	15.0°	15.0°
Slt. rng:	20632 ft	Tgt Dep Ang:	15.0°	15.0°	15.0°	15.0°
Look:	Right	St rng (ft):	19097	19097	19097	19097
Depr Ang:	25.0°	Near Rng Dep:	17.8°	17.8°	17.8°	17.8°
Des. trk:	336.0°	Far Rng Dep:	9.6°	9.6°	9.6°	9.6°
Start Sq:	90.0°	Atten (dB):	47.0	44.0	37.0	61.0
End Sq:	90.0°	RMS Video (%FS)	26.3	18.2	34.2	22.6

WAYPOINTS

Line_up:	N 46:27.86	W 68:24.91	Main Target:	GP
Start:	N 46:38.83	W 68:31.96	Mocomp Point:	
End:	N 46:47.96	W 68:37.88	Lat:	N 46:44.73
			Long:	W 68:30.56
From:	N 31:10.14	W 60:45.47	Tgt Trk:	0.0
To:	N 61:15.96	W 82:33.31	Tgt Vel:	0.0
			Alt:	660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel:	1	Filter damping is Hi	->	10 sec
Resolution:	N/A	PRF Factor is FAST	(262.5 kts)	-
Swath width:	Single	Ave Gndspd:	Real	->
RMS Time Constant:	2^7	Mocomp Off for Chnl	1, 2, 3, 4	
Position Reference:	ON	GPS Vel/Pos Reference		
Atten. Tracking:	OFF	Adj Gnd Scene:	5000.0 ft	
Range Gate Delta:	0.0 ft	Range Tracking is	OFF	
Azimuth Presum Rate:	Presum6	Clutterlock Reference:	OFF	
TX Chirp Filename:	CTL1U2B	RX Chirp Filename:	CRL1N0A	
Ave Ref Vel ->	-.8 fps (s.d.=	.9)		
Ave Fil Vel ->	-2.0 fps (s.d.=	.8)		

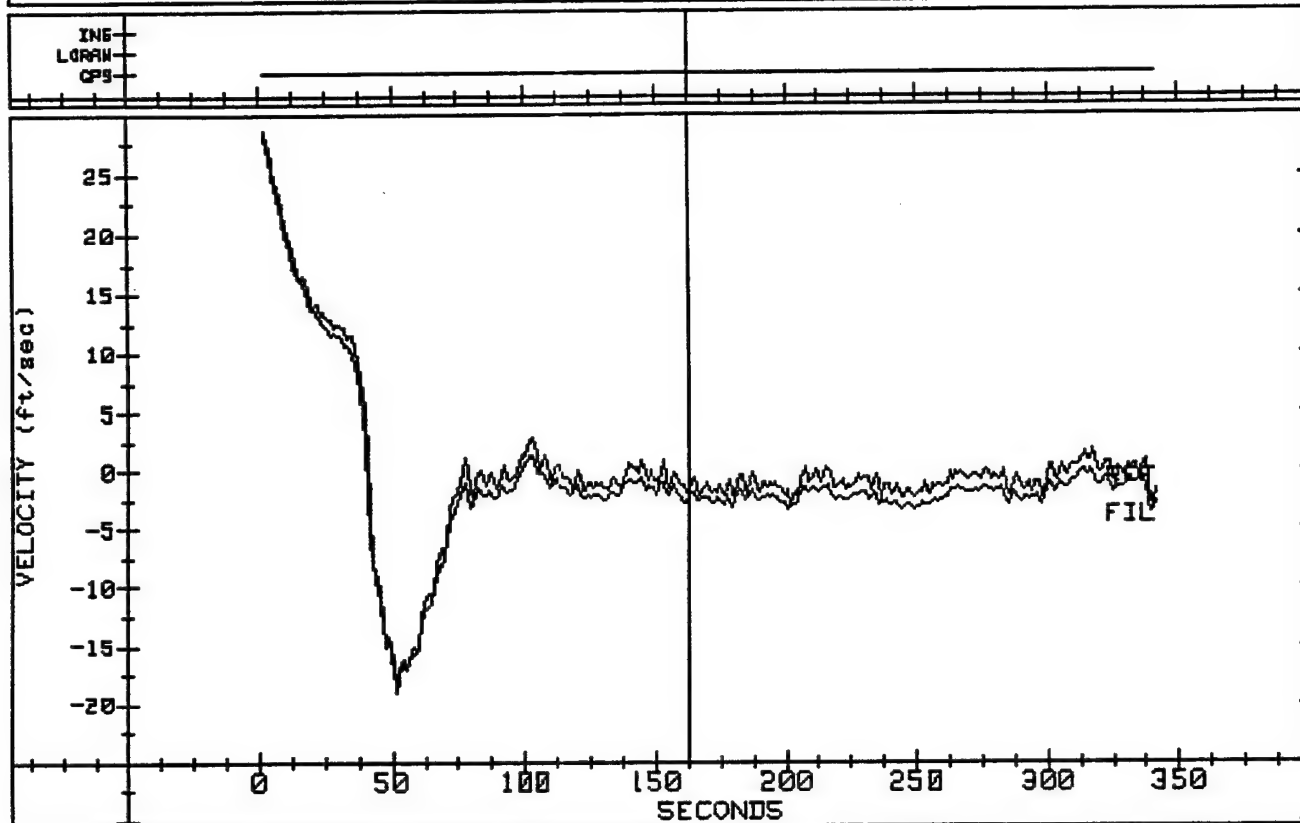
NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation:	0.0°	
L: -70.0	Azimuth:	0.0°	
C: -70.0	Pitch:	0.0°	
P: 46.5			
		Starting:	5221 ft (1)
		Ending:	6487 ft (1)

Vel Bias	CAL Atten	LINE Map Time (UCT)
X: 1035.0	X: 63.8 dB	Start: 01:35:52
Y: -433.0	L: 63.8 dB	End: 01:38:37
Z: 6697.0	C: 63.8 dB	

Mocomp Counters

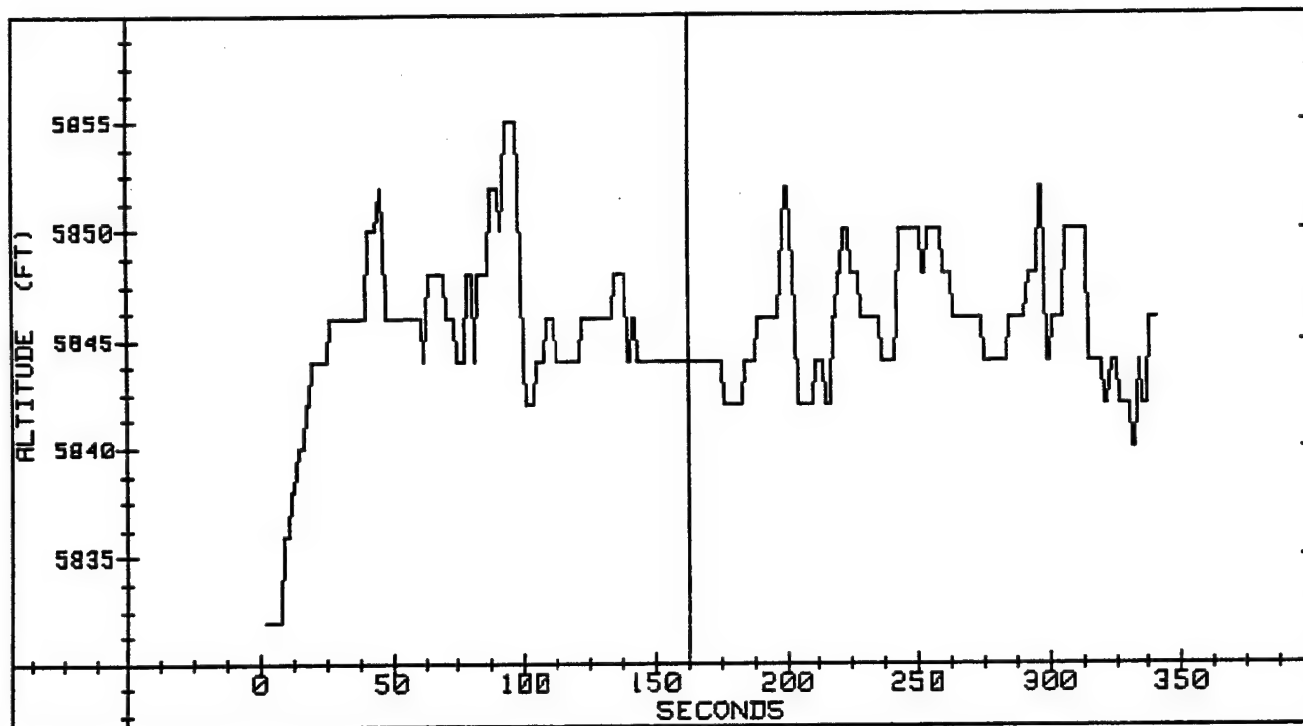
Start:	1255642	001328DAh	CPA (UCT):	00:00:00
End:	1283311	001394EFh	Alt:	0 ft (GPS)
			Lat:	N 0:00: 0
			Lon:	E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 178 TIME 1:32 PASS 22



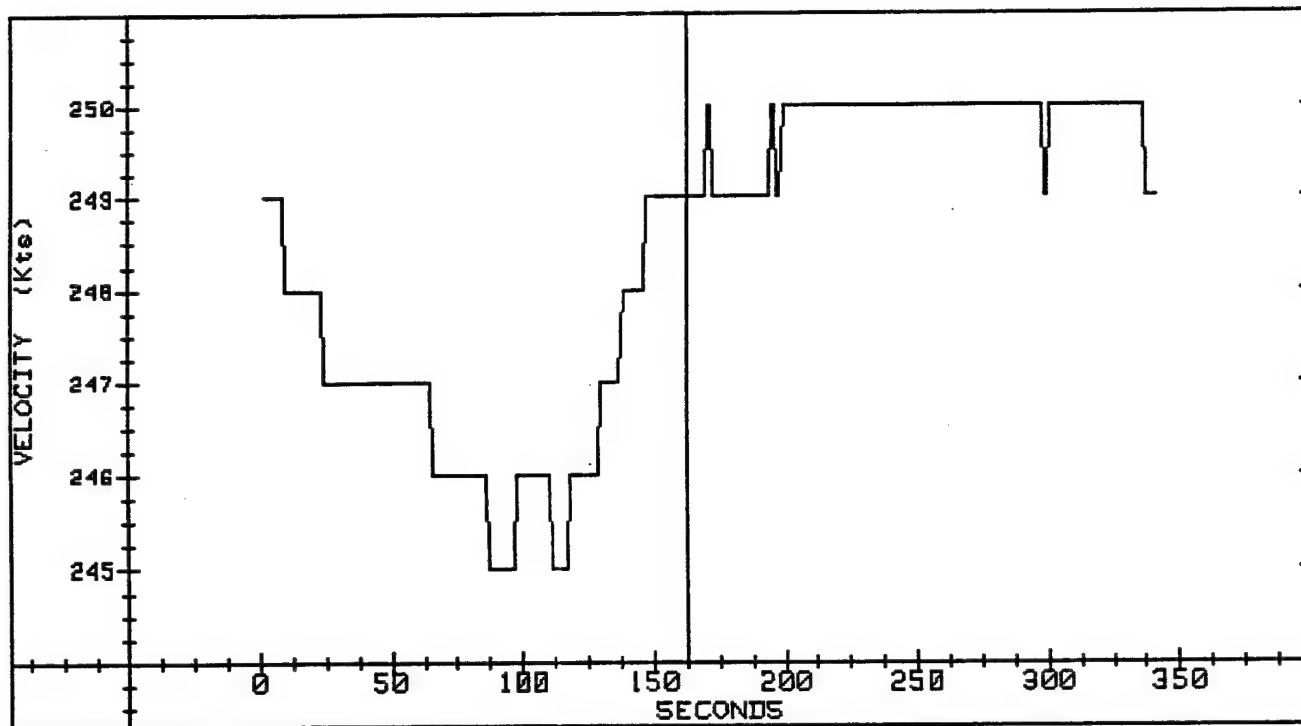
BARO ALTITUDE

DAY 178 TIME 1:32 PASS 22 m= 5846. sd= 2.84391



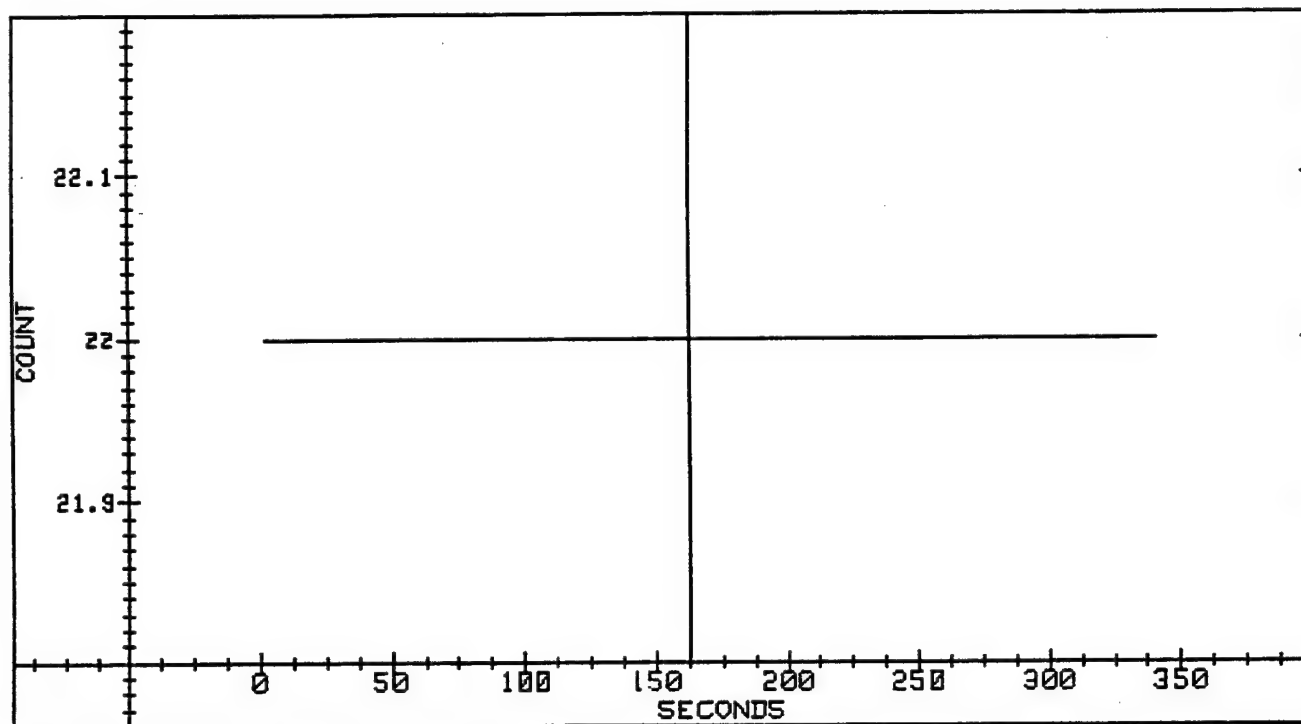
INS GROUND SPEED

DRY 178 TIME 1:32 PASS 22 m= 249.8, sd= .374464



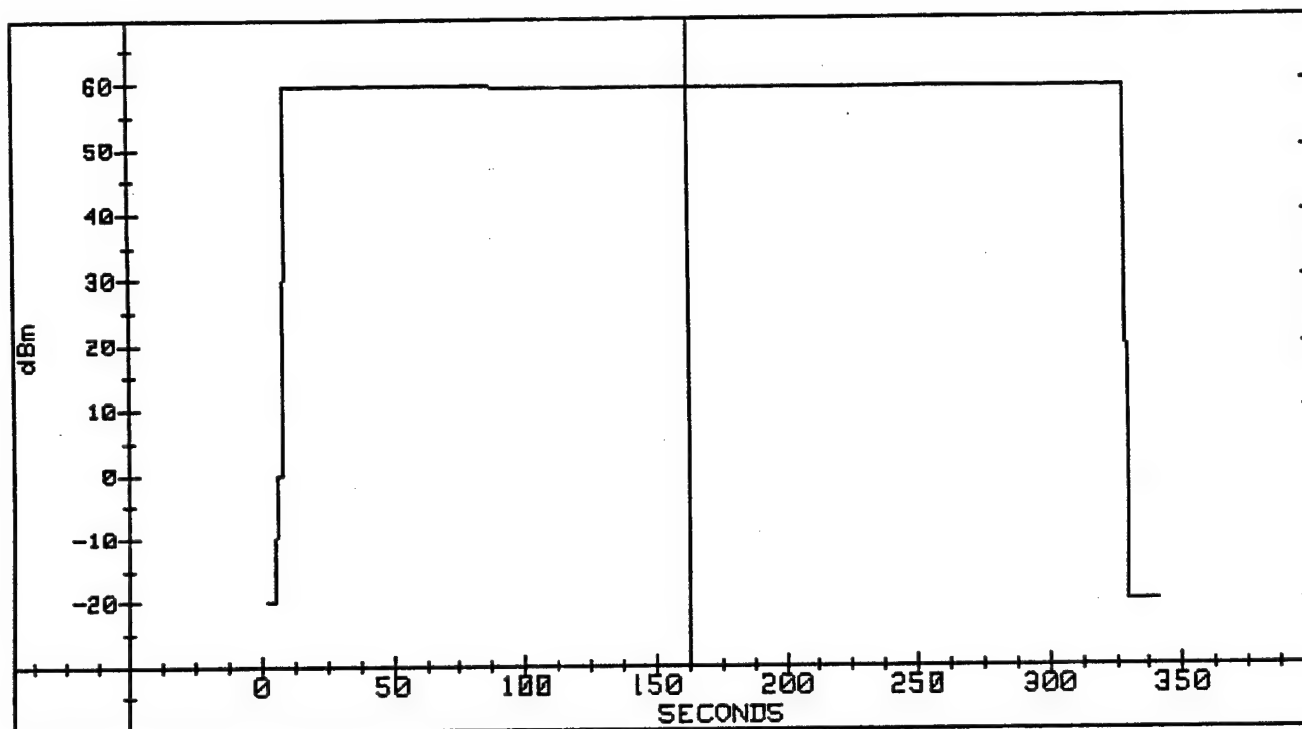
PASS NUMBER

DAY 178 TIME 1:32 PASS 22 m= 22. sd= 0



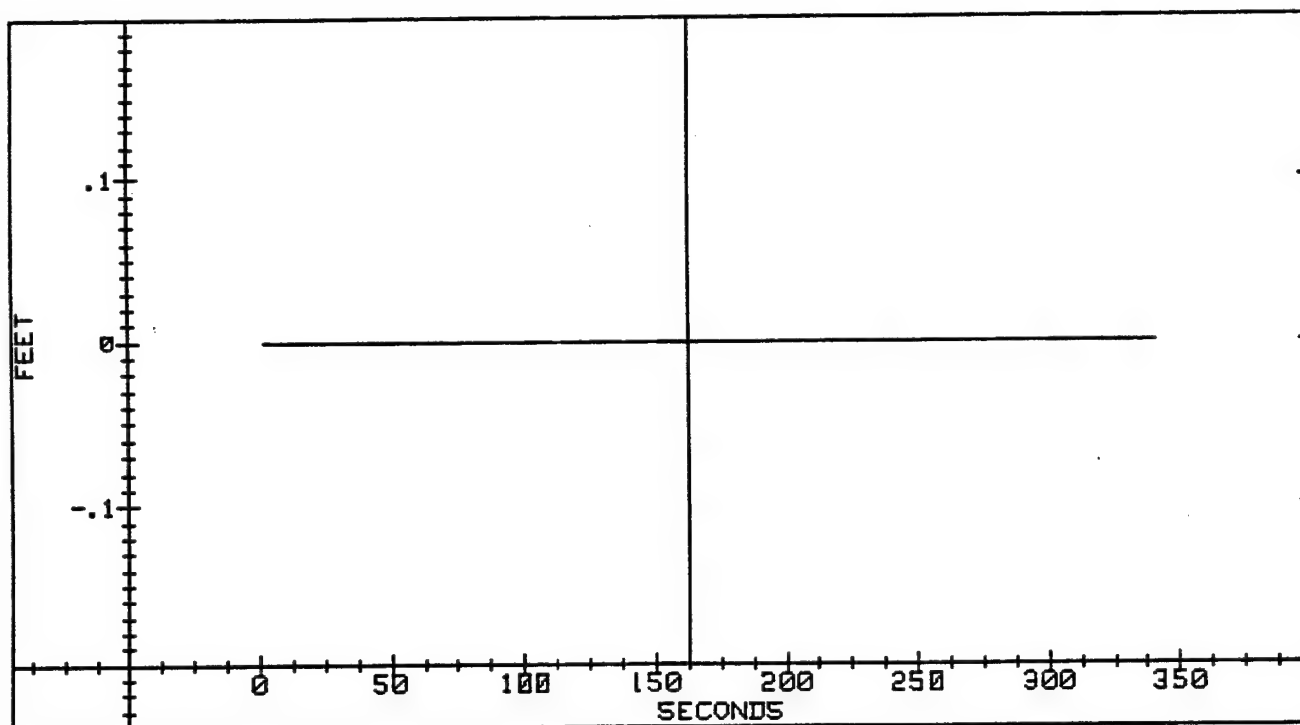
P Band Power

DAY 178 TIME 1:32 PASS 22 m= 53.06, sd= 21.2951



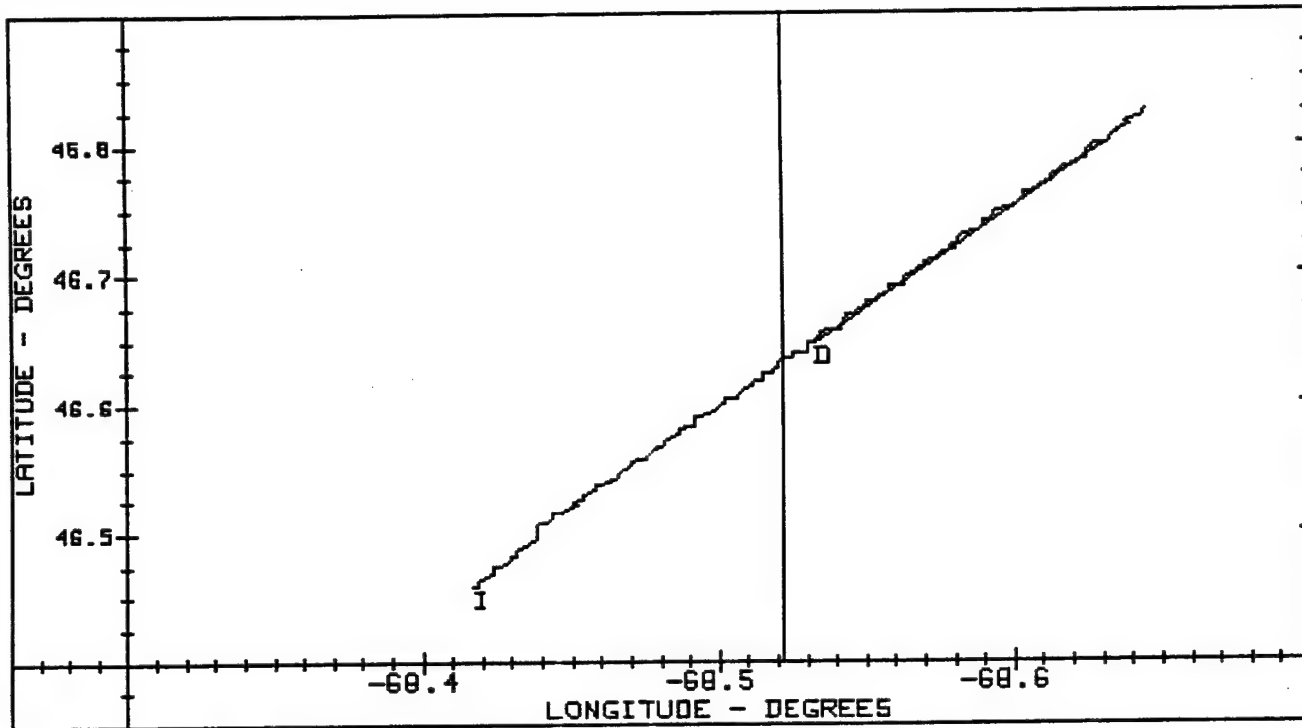
GPS ALTITUDE

DAY 178 TIME 1:32 PASS 22 m= 0, sd= 0



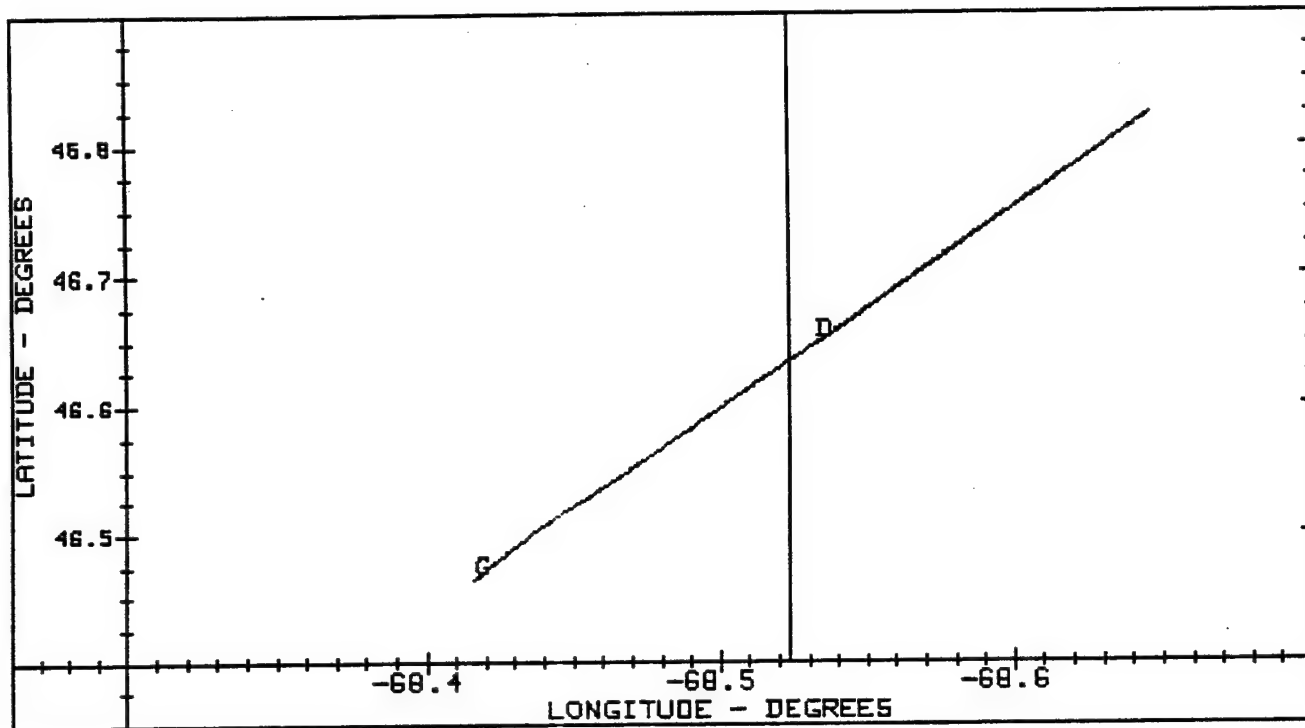
INS AIRCRAFT POSITION

DAY 170 TIME 1:32 PASS 22



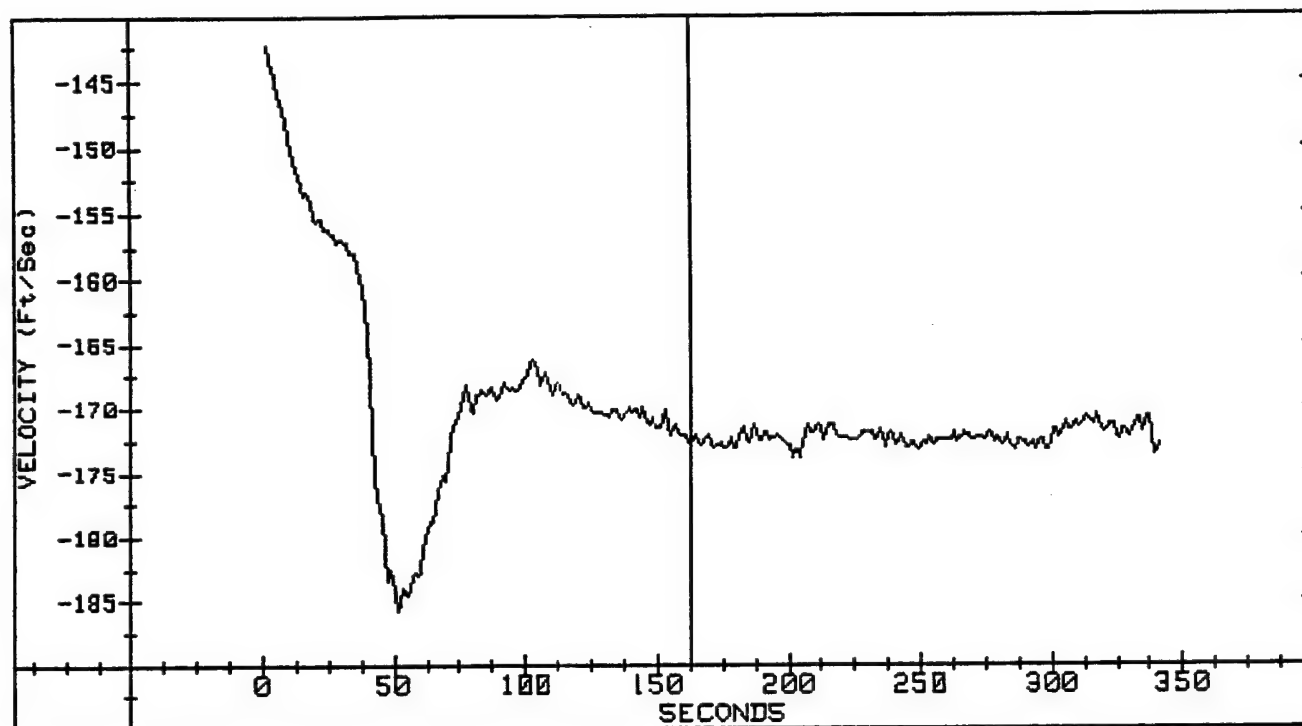
GPS AIRCRAFT POSITION

DAY 178 TIME 1:32 PASS 22



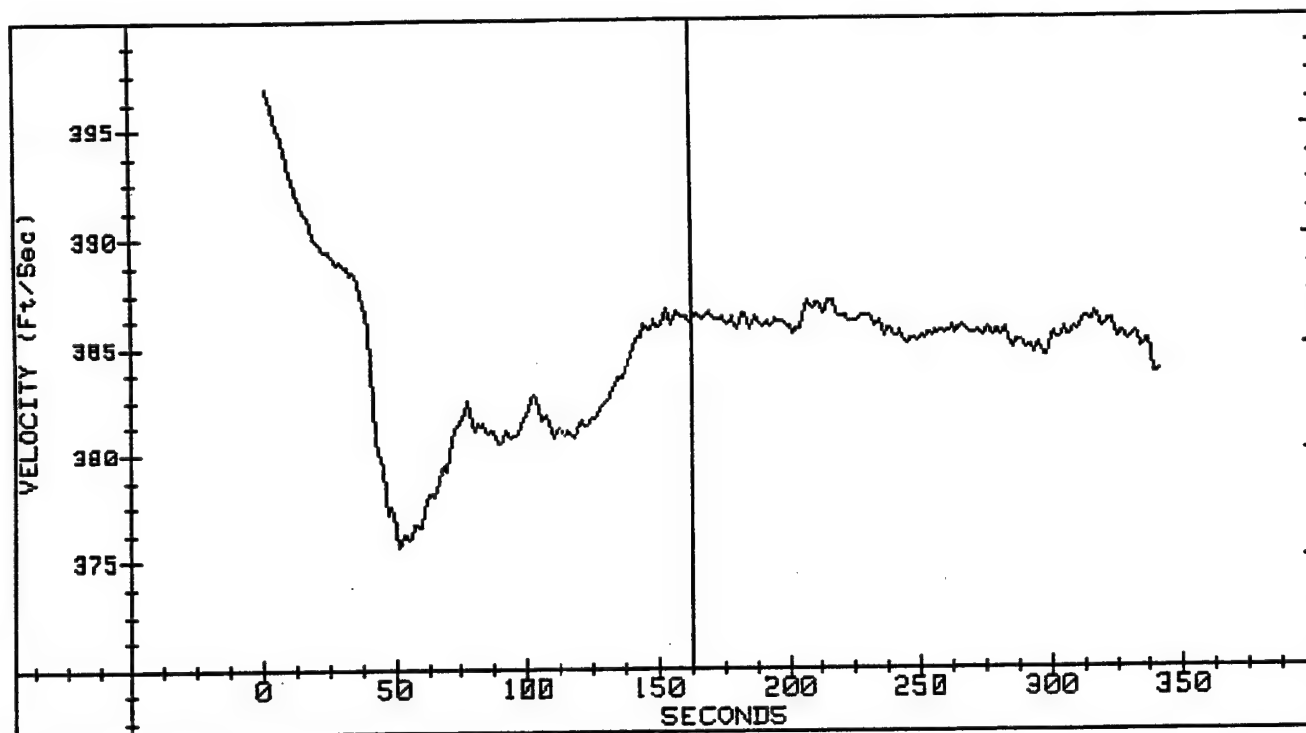
GPS V_e

DAY 170 TIME 1:32 PASS 22 m= -172.2, sd= .659381



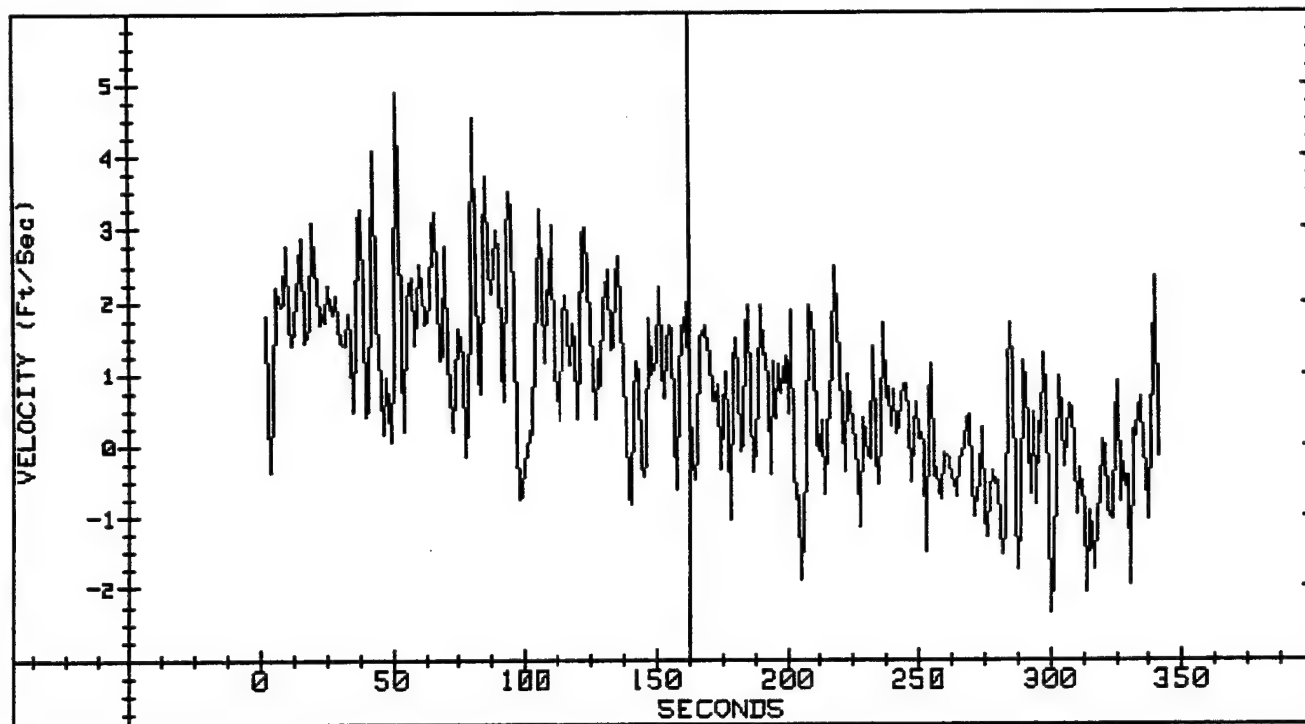
GPS Vn

DAY 178 TIME 1:32 PASS 22 m= 385.8, sd= .607759



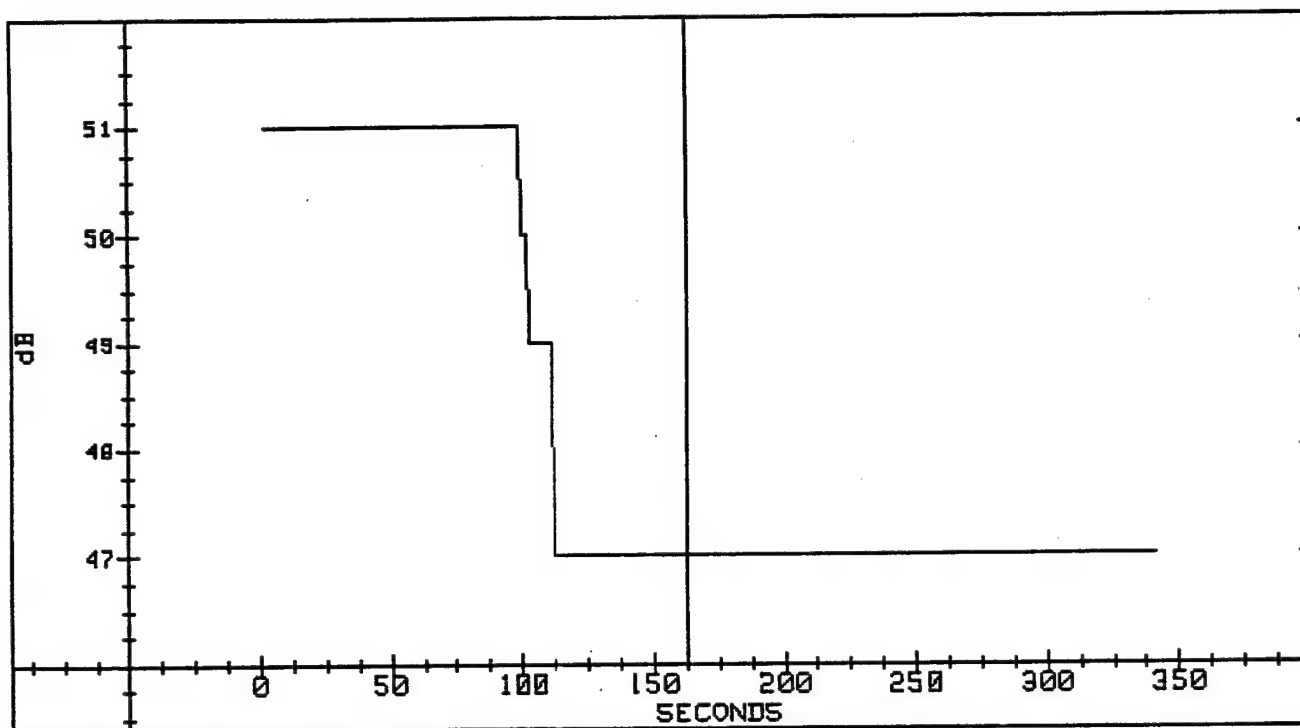
GPS Vv

DAY 170 TIME 1:32 PASS 22 m= .07587, sd= .930928



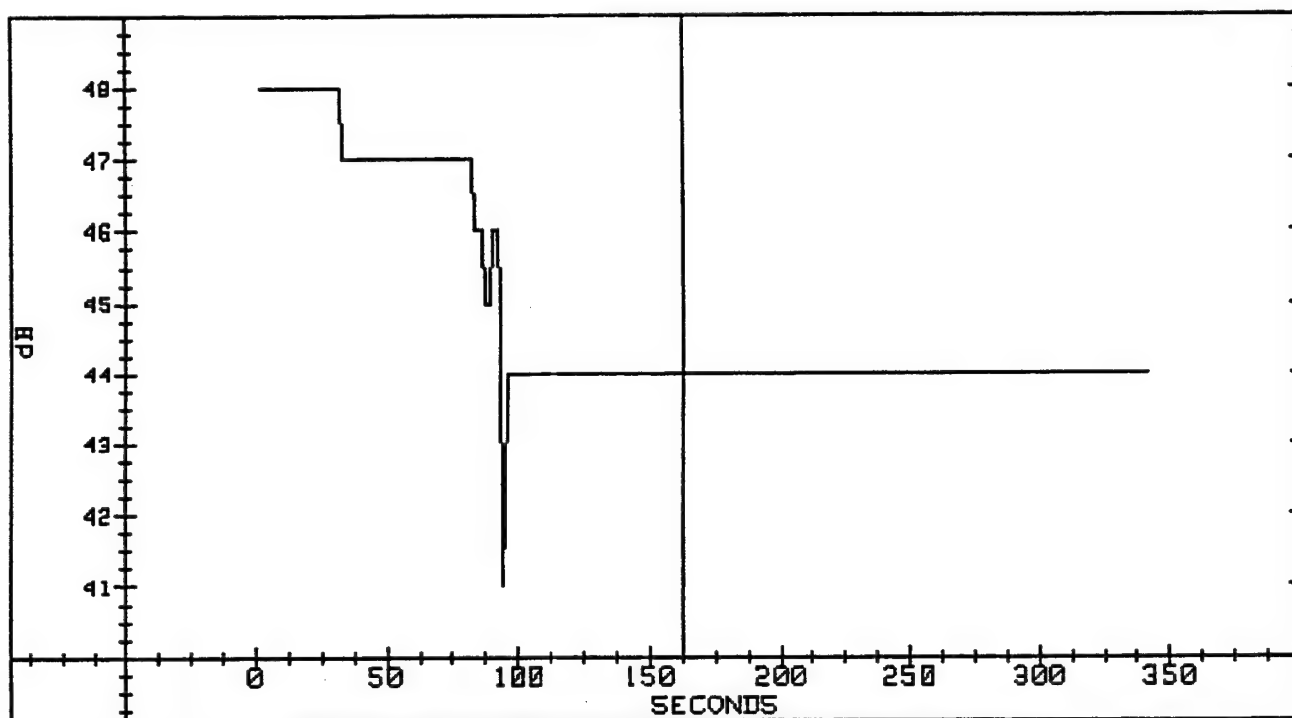
Ch1 RES Attenuation

DAY 178 TIME 1:32 PASS 22 m= 47, sd= 0



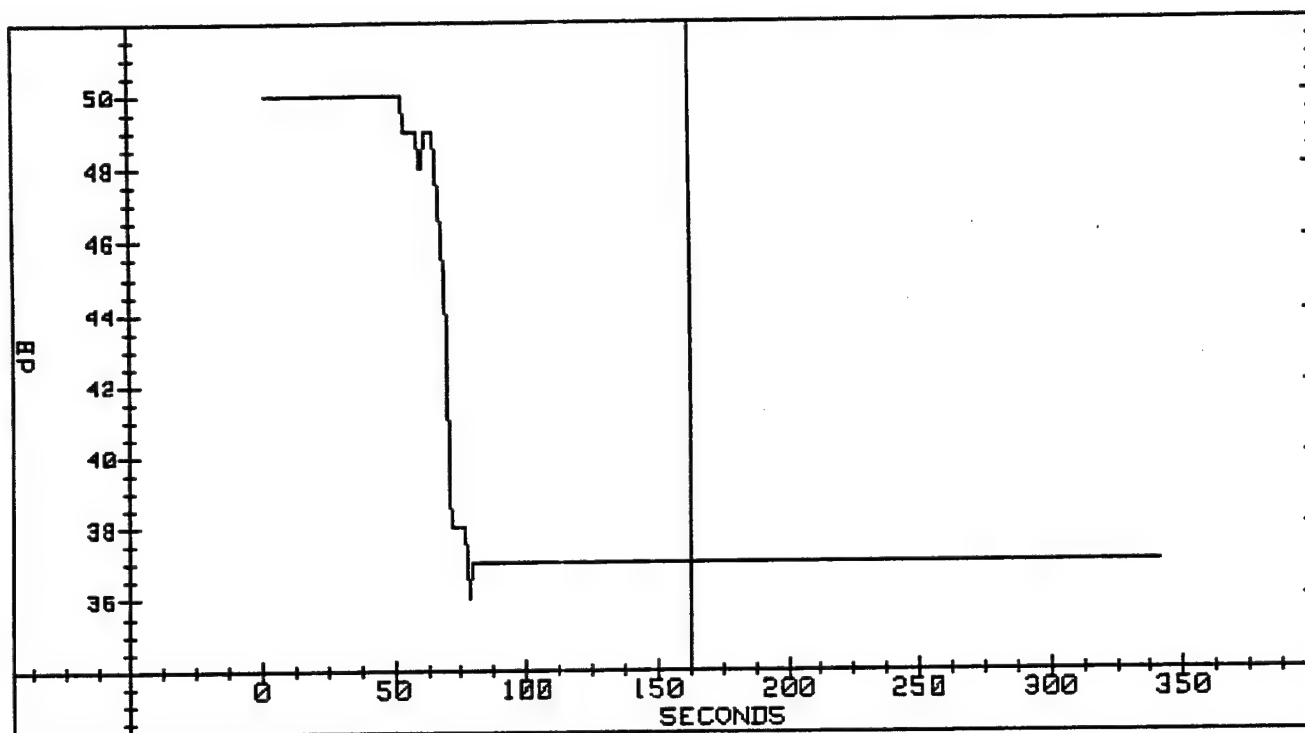
Ch2 RES Attenuation

DAY 178 TIME 1:32 PASS 22 m= 44, sd= 0



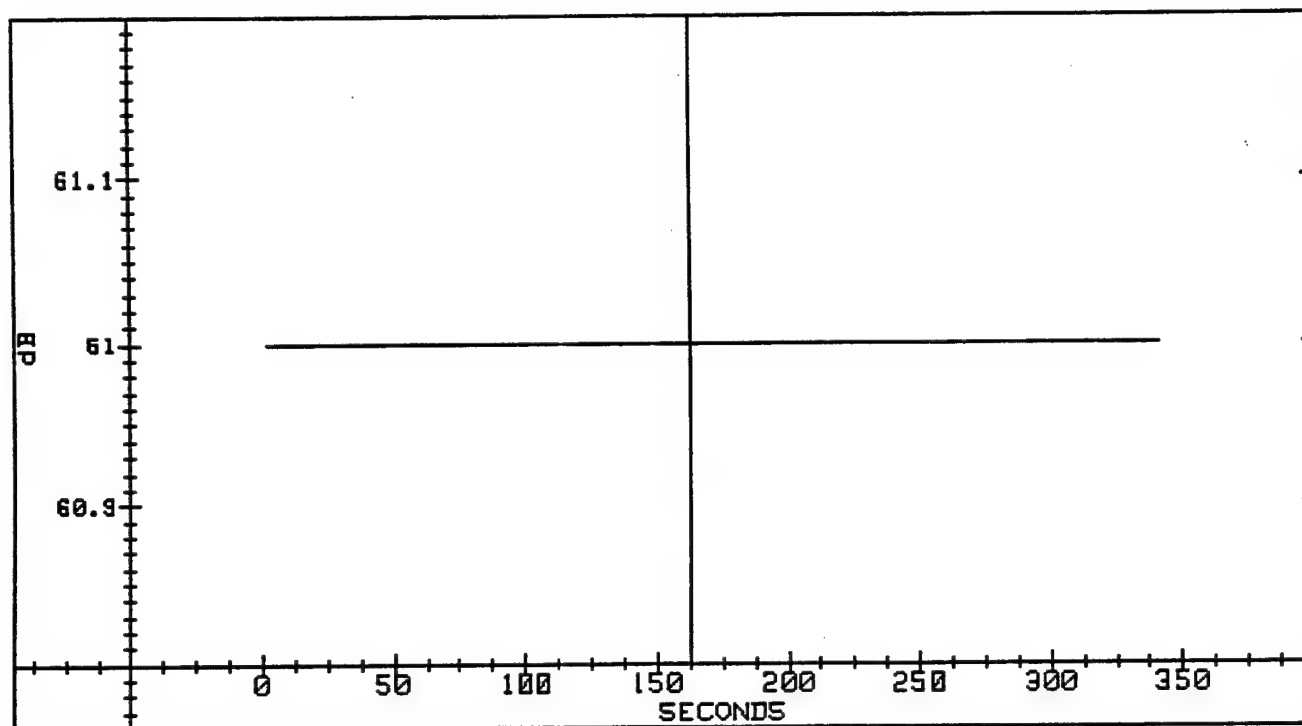
Ch3 RES Attenuation

DAY 170 TIME 1:32 PASS 22 m= 37, sd= 0



Ch4 RES Attenuation

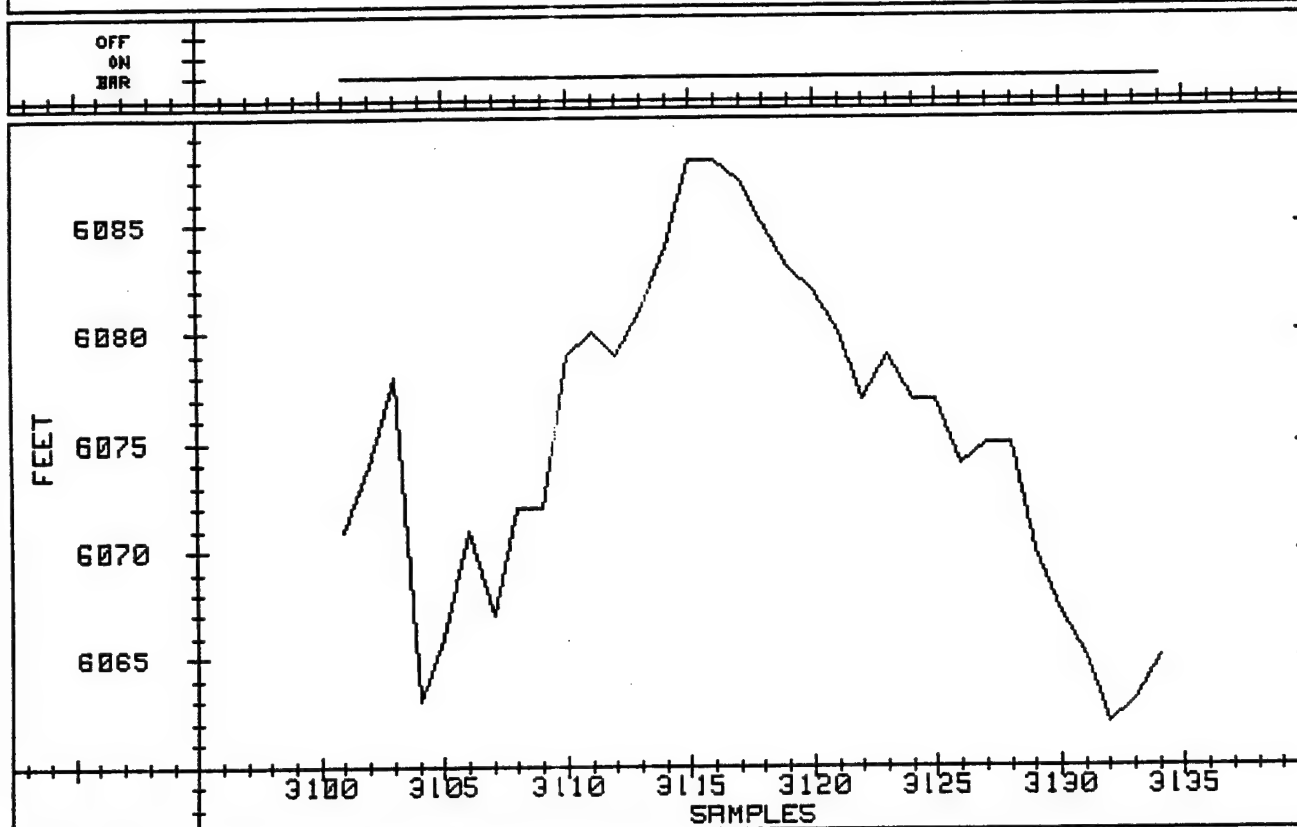
DAY 170 TIME 1:32 PASS 22 m= 61, sd= 0



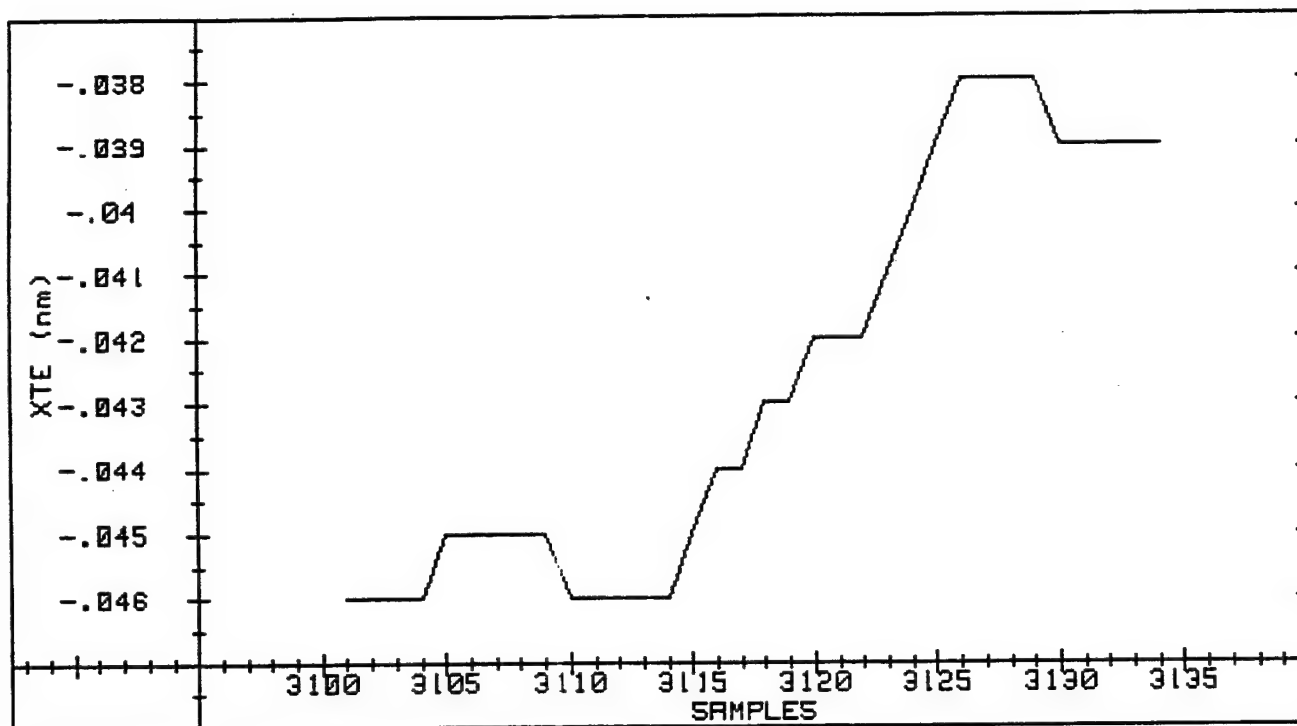
GPS ALTITUDE

MEAN= 6075.18 STANDARD DEVIATION= 7.42203

DATE: June 26, 1995 PASS 22

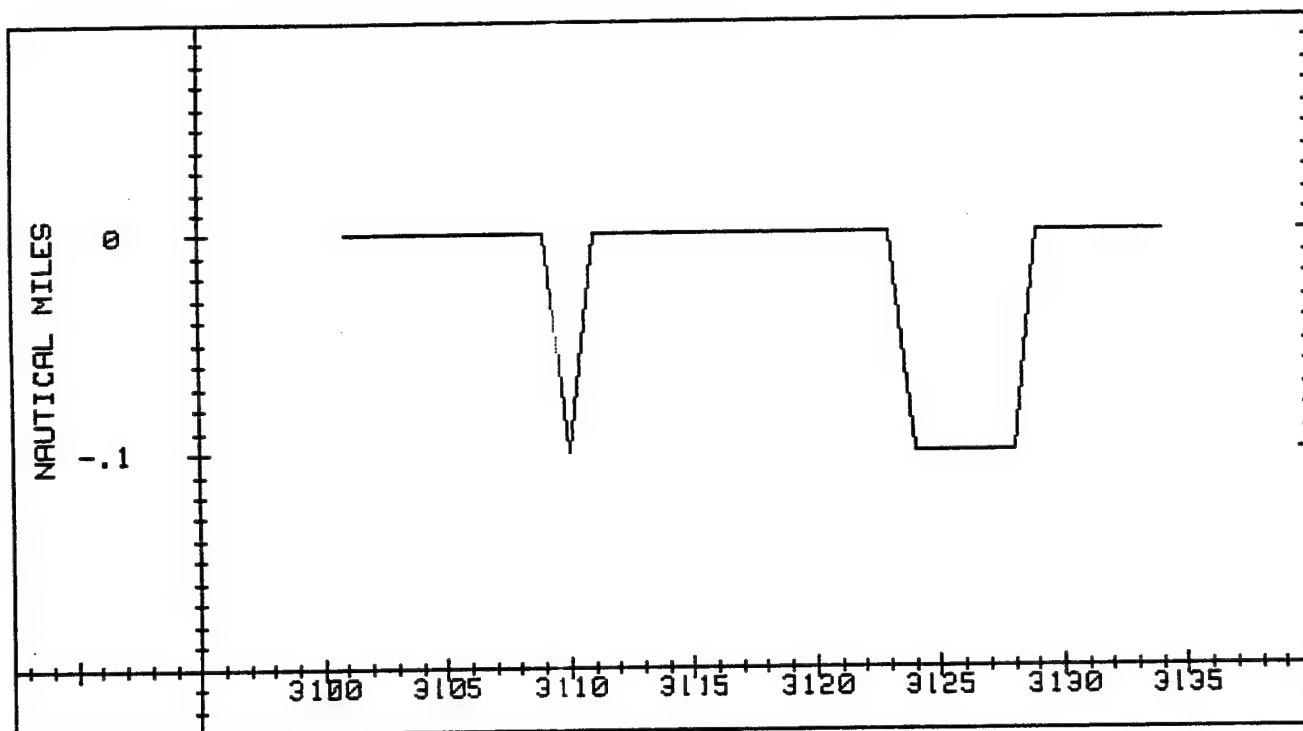


GPS Cross Track Error
MEAN= -.0426765 STANDARD DEVIATION= .00304593
DATE: June 26, 1995 PASS 22

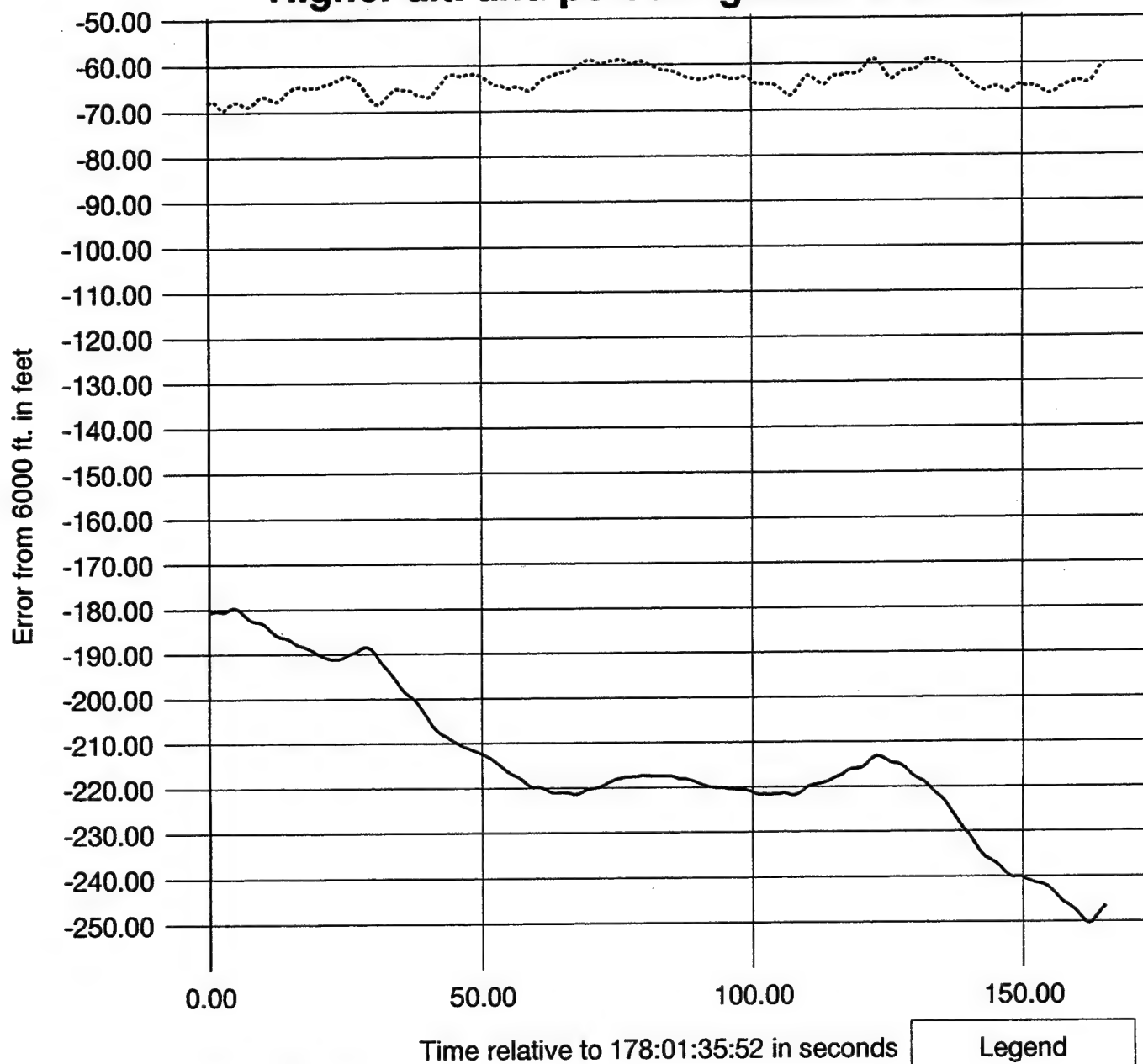


INS CROSS TRACK ERROR

MEAN= -.0176471 STANDARD DEVIATION= .038122
DATE: June 26, 1995 PASS 22



Portage, ME - June 26, 1995 - Pass 22 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



	Mean	St. Dev.
ALT.	-63.57	2.51
XTK.	-214.52	17.61

Legend	
—	P5-xt
.....	P5-alt

27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 41
Mission: PORTAGE MAINE, DAY

Time: 178:01:46:53
Pass 23
Req.# 22

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	6000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	5845 ft s.d.=	3 Swath Ctr Ang:	15.0°	15.0°	15.0°	15.0°
Slt. rng:	20632 ft	Tgt Dep Ang:	15.0°	15.0°	15.0°	15.0°
Look:	Right	St rng (ft):	19097	19097	19097	19097
Depr Ang:	25.0°	Near Rng Dep:	17.8°	17.8°	17.8°	17.8°
Des. trk:	156.0°	Far Rng Dep:	9.6°	9.6°	9.6°	9.6°
Start Sq:	90.0°	Atten (dB):	47.0	47.0	46.0	61.0
End Sq:	90.0°	RMS Video (%FS)	25.6	23.4	18.9	28.9

WAYPOINTS

Line_up:	N 47:01.57	W 68:36.32	Main Target: GP
Start:	N 46:50.62	W 68:29.18	Mocomp Point:
End:	N 46:41.49	W 68:23.26	Lat: N 46:44.73
			Long: W 68:30.56
From:	N 61:18.71	W 82:25.28	Tgt Trk: 0.0 Tgt Vel: 0.0
To:	N 31:12.69	W 60:36.89	Alt: 660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1	Filter damping is Hi -> 10 sec
Resolution: N/A	PRF Factor is FAST (262.5 kts) -
Swath width: Single	Ave Gndspd: Real -> 252.8 kts
RMS Time Constant: 2^7	Mocomp Off for Chnl 1, 2, 3, 4
Position Reference: ON	GPS Vel/Pos Reference
Atten. Tracking: OFF	Adj Gnd Scene: 5000.0 ft
Range Gate Delta: 0.0 ft	Range Tracking is OFF
Azimuth Presum Rate: Presum6	Clutterlock Reference: OFF
TX Chirp Filename: CTL1U2B	RX Chirp Filename: CRL1NOA

Ave Ref Vel -> .4 fps (s.d.= 1.0)
Ave Fil Vel -> 1.2 fps (s.d.= .8)

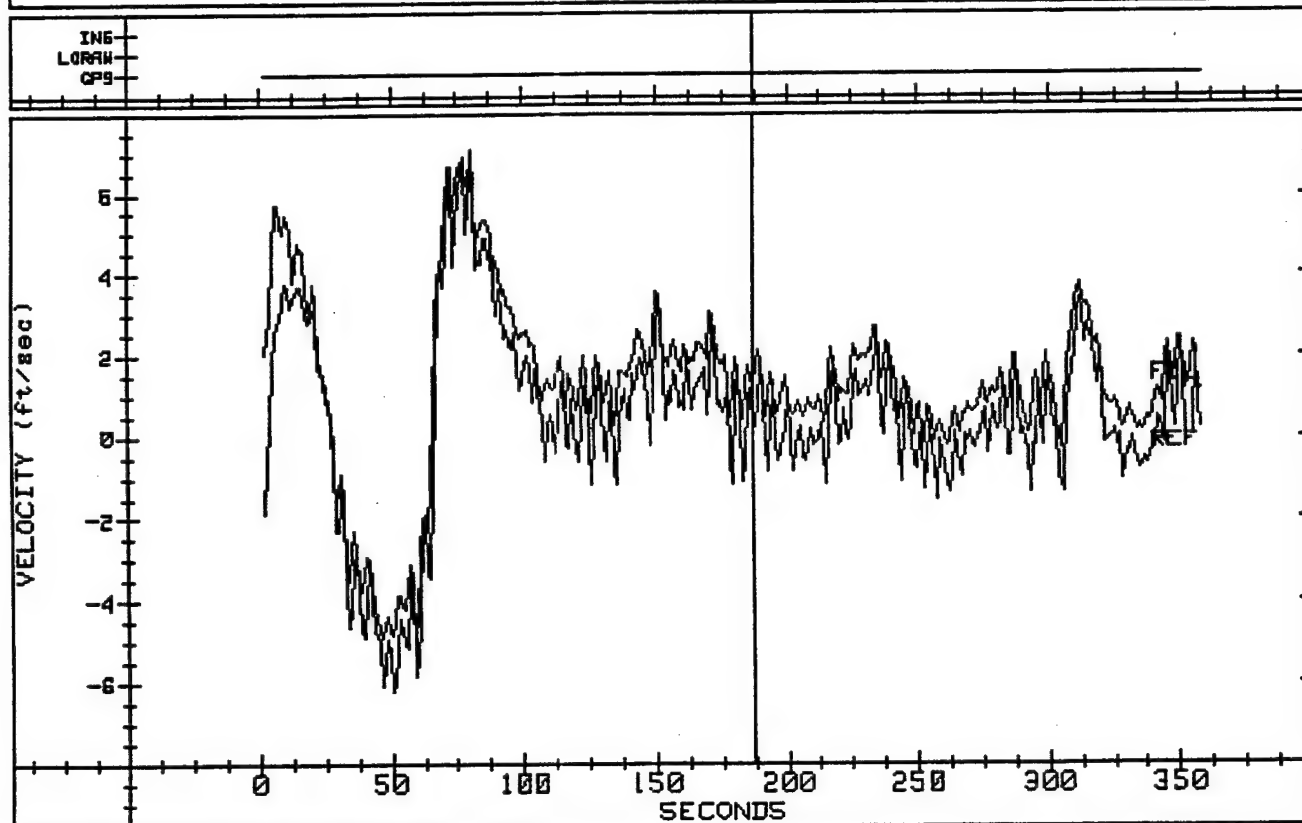
NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation: 0.0°	Starting: 6499 ft	(1)
L: -70.0	Azimuth: 0.0°	Ending: 7709 ft	(1)
C: -70.0	Pitch: 0.0°		
P: 46.3			

Vel Bias	CAL Atten	LINE Map Time (UCT)
X: 1035.0	X: 63.8 dB	Start: 01:46:53
Y: -433.0	L: 63.8 dB	End: 01:49:31
Z: 6697.0	C: 63.8 dB	

Mocomp Counters

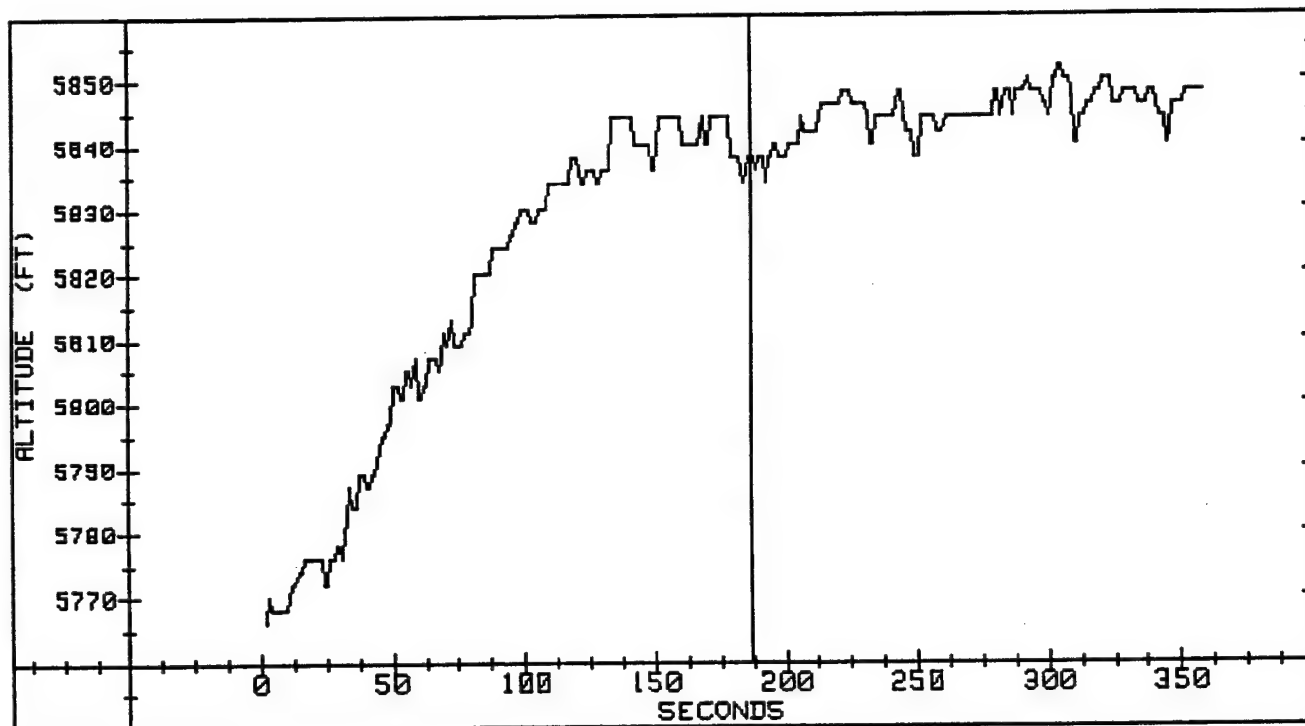
Start:	1316823	001417D7h	CPA (UCT): 00:00:00
End:	1343323	00147F5Bh	Alt: 0 ft (GPS)
			Lat: N 0:00: 0
			Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 178 TIME 1:43 PASS 23



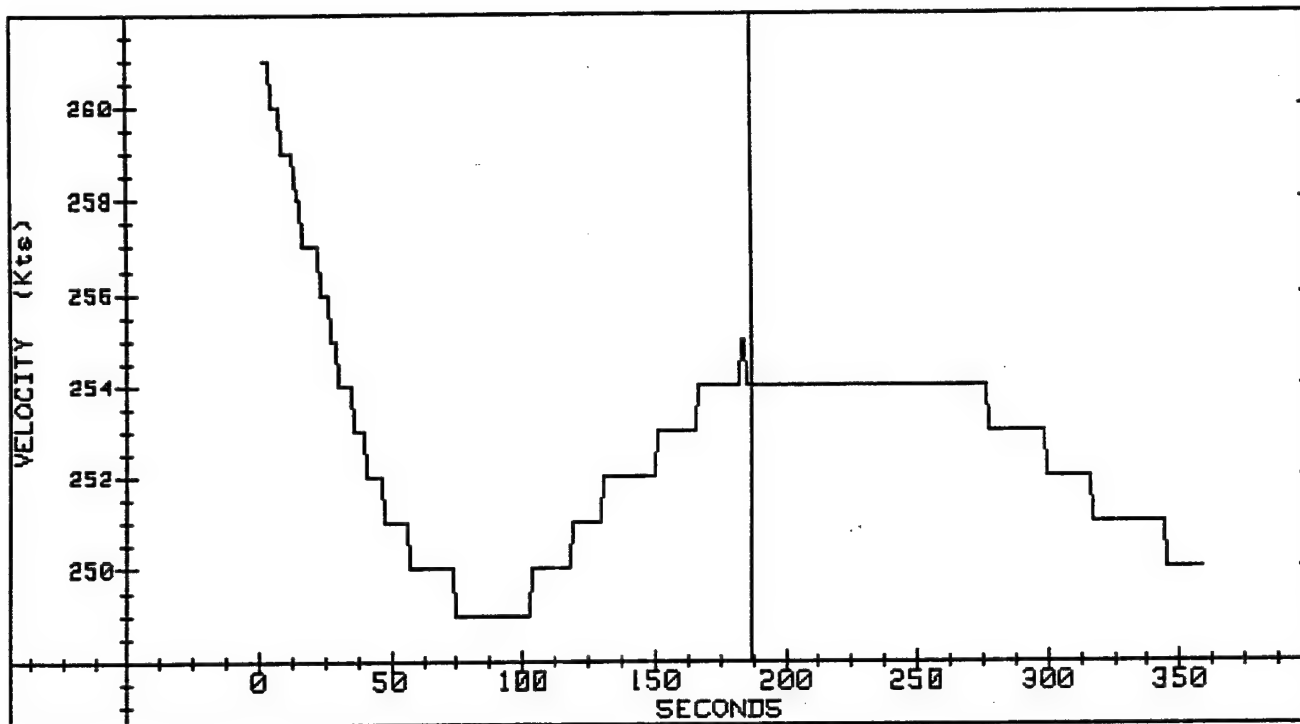
BARO ALTITUDE

DAY 170 TIME 1:43 PASS 23 m= 5845. sd= 2.87107



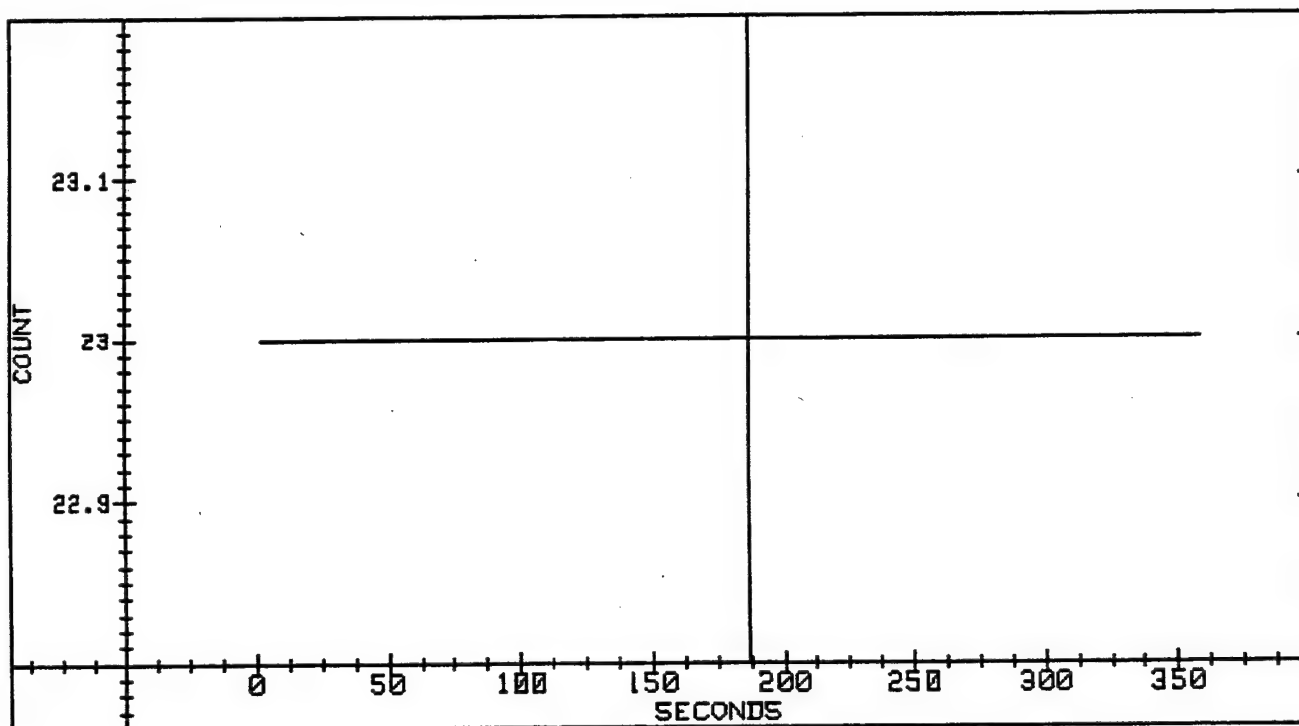
INS GROUND SPEED

DRY 178 TIME 1:43 PASS 23 m= 252.8. sd= 1.42625



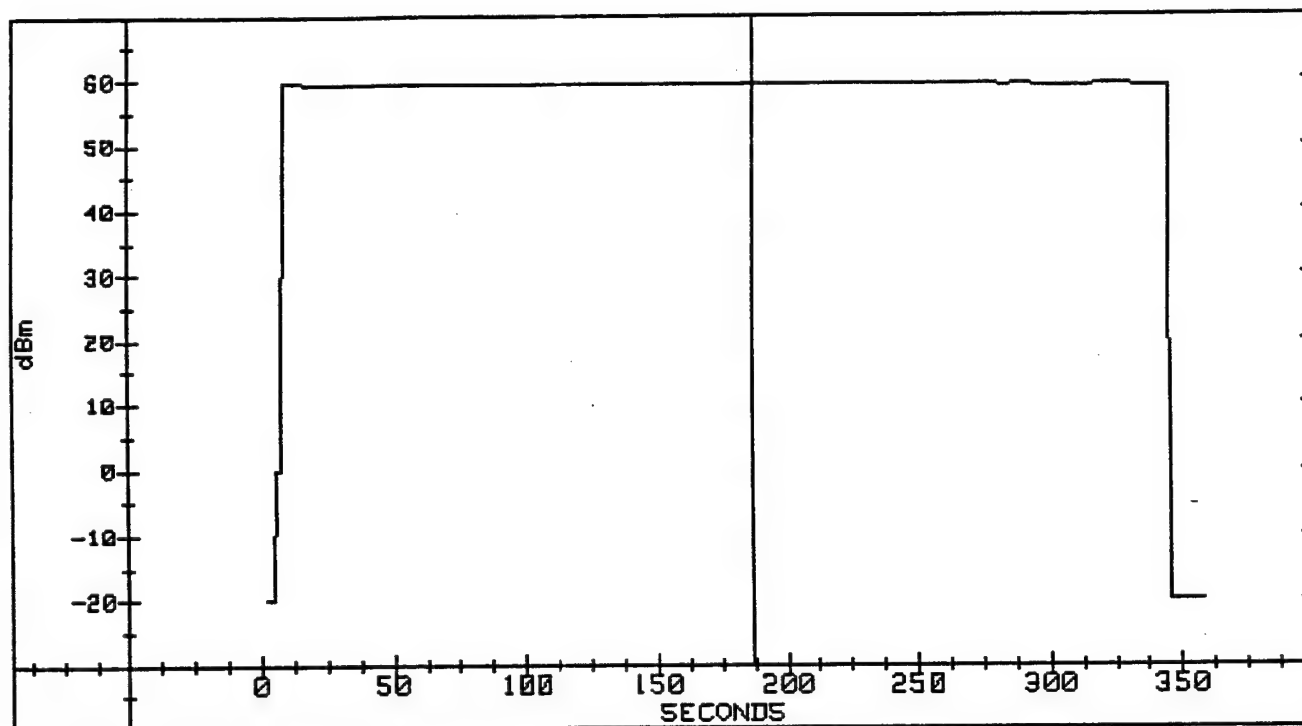
PASS NUMBER

DAY 178 TIME 1:43 PASS 23 m= 23. sd= 0



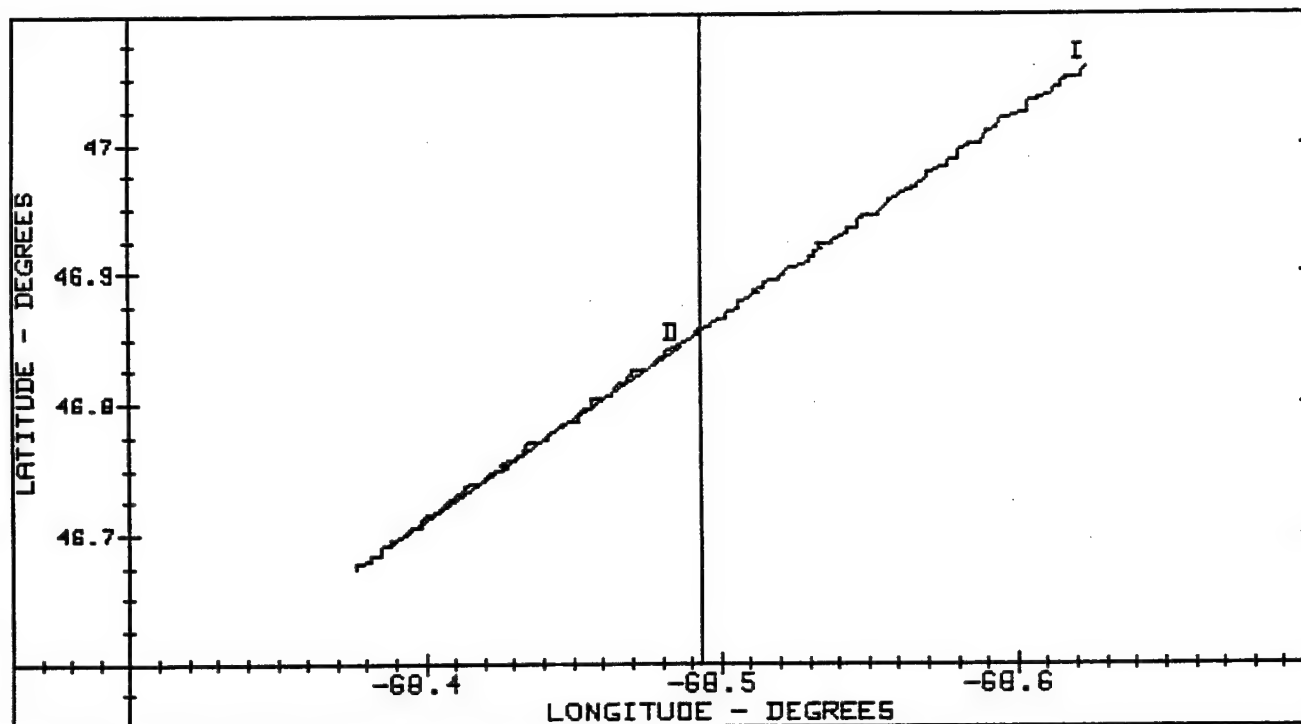
P Band Power

DRY 178 TIME 1:43 PASS 23 m= 52.61, sd= 21.6652



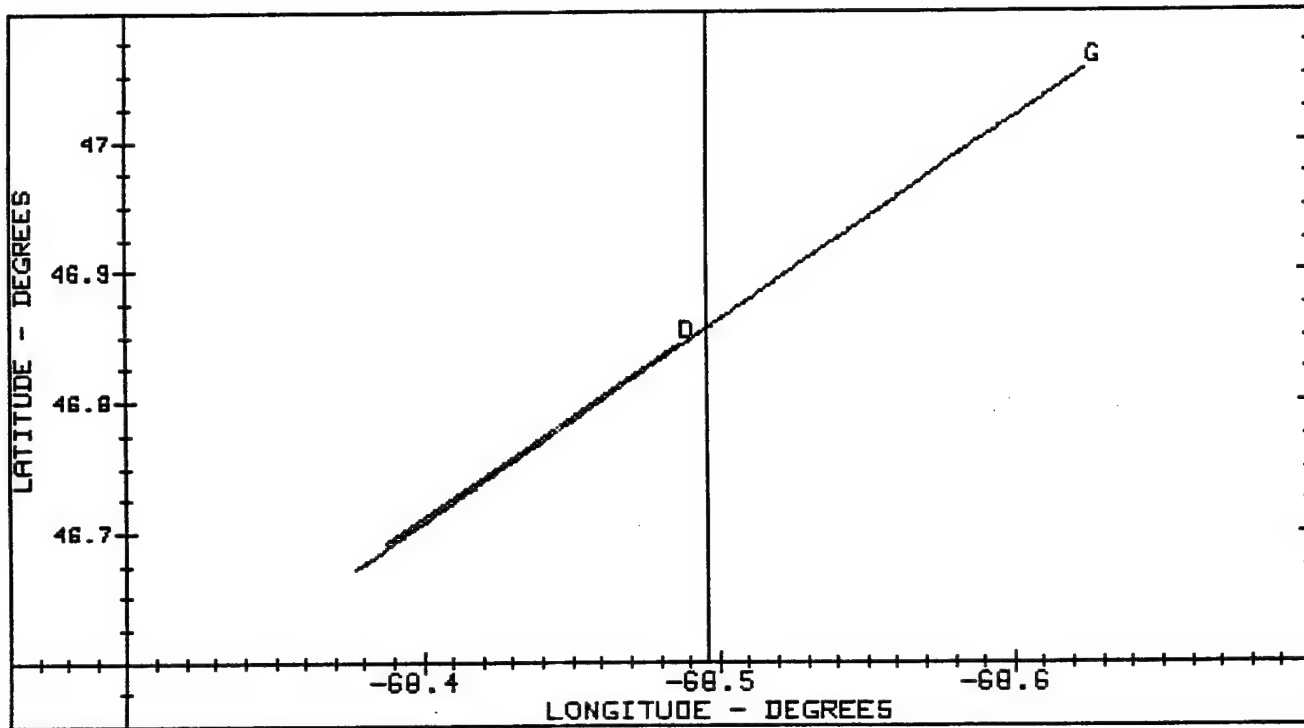
INS AIRCRAFT POSITION

DAY 170 TIME 1:43 PASS 23



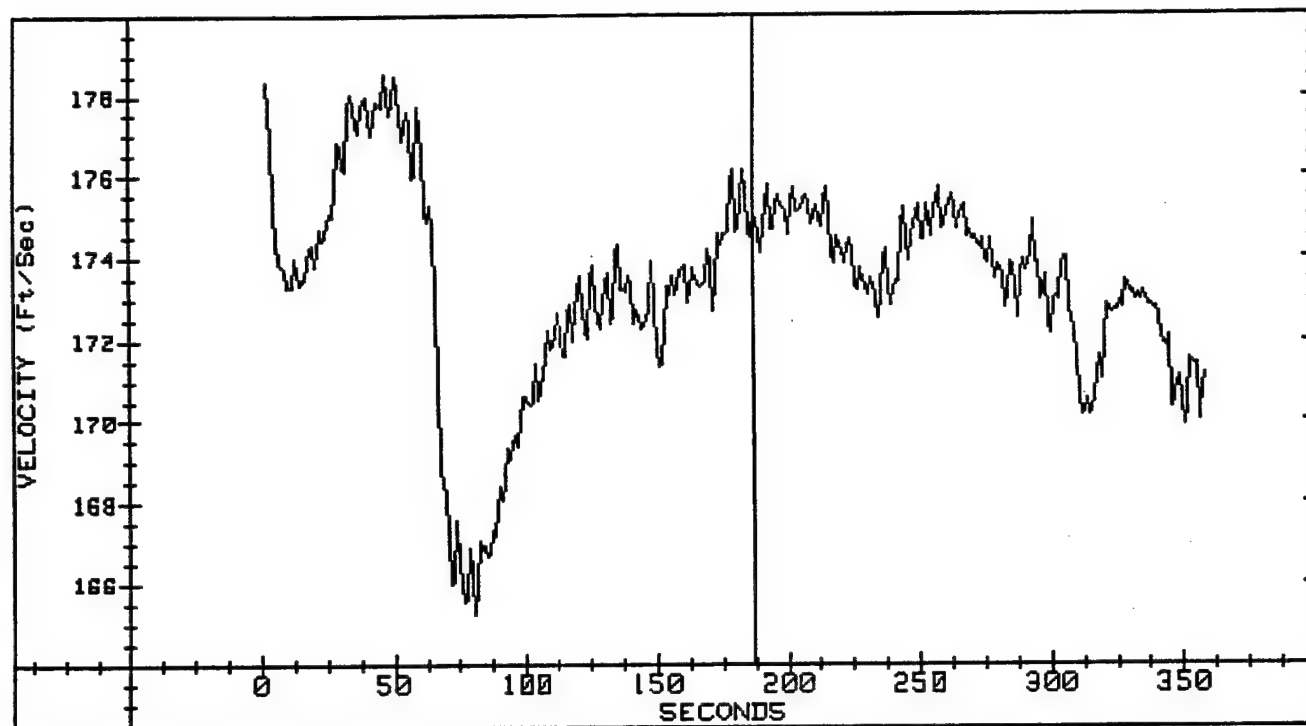
GPS AIRCRAFT POSITION

DAY 178 TIME 1:43 PASS 23



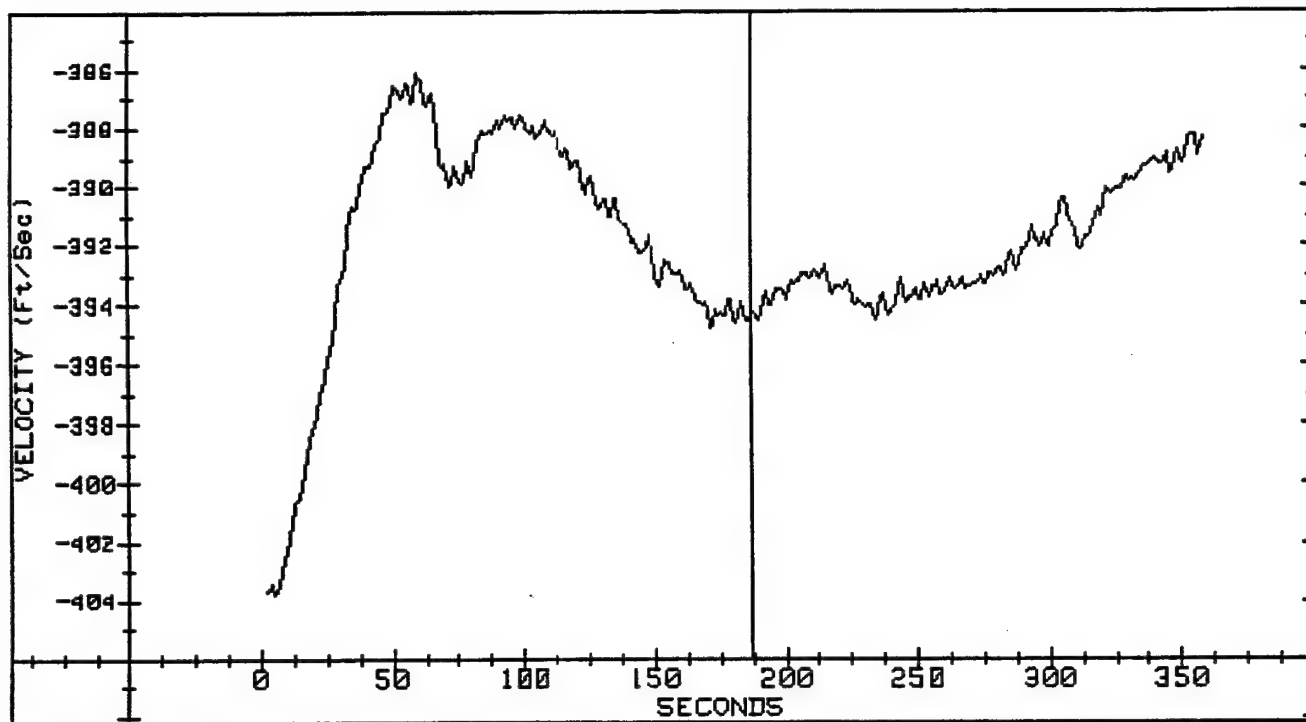
GPS V_e

DAY 178 TIME 1:43 PASS 23 m= 173.4, sd= 1.4614



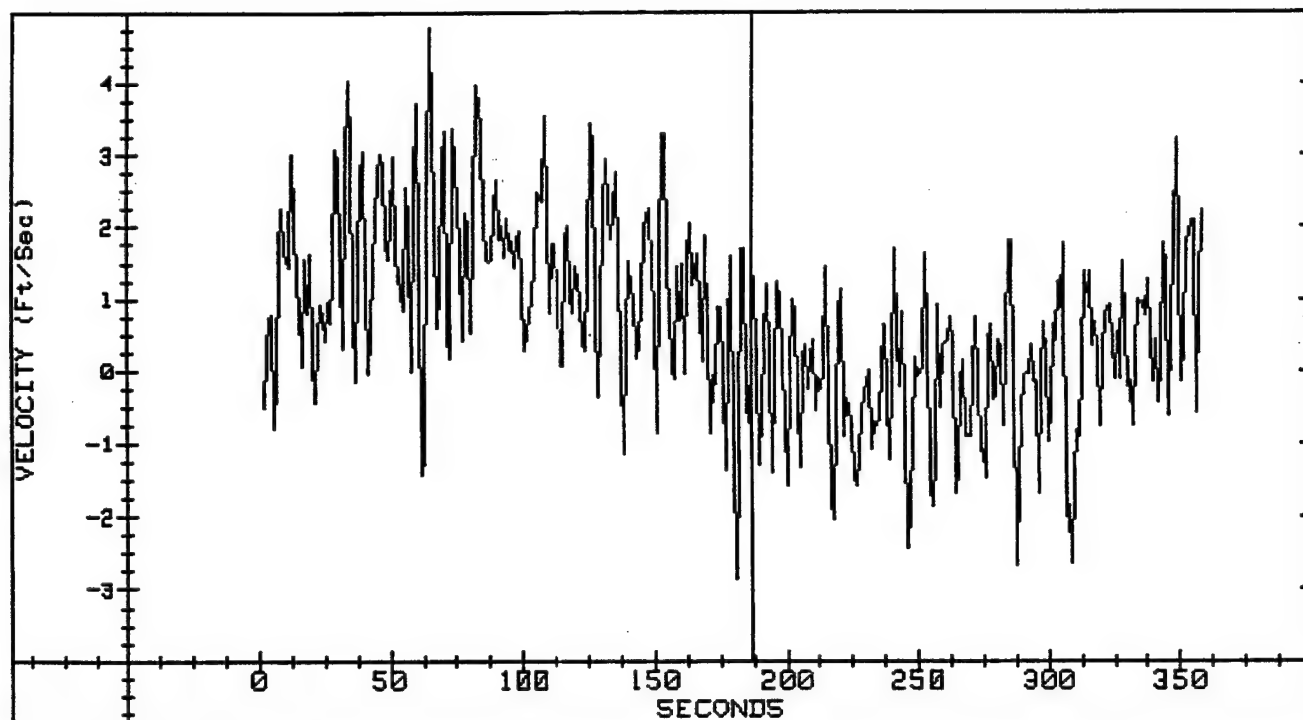
GPS Vn

DAY 178 TIME 1:43 PASS 23 m= -392, sd= 1.74411



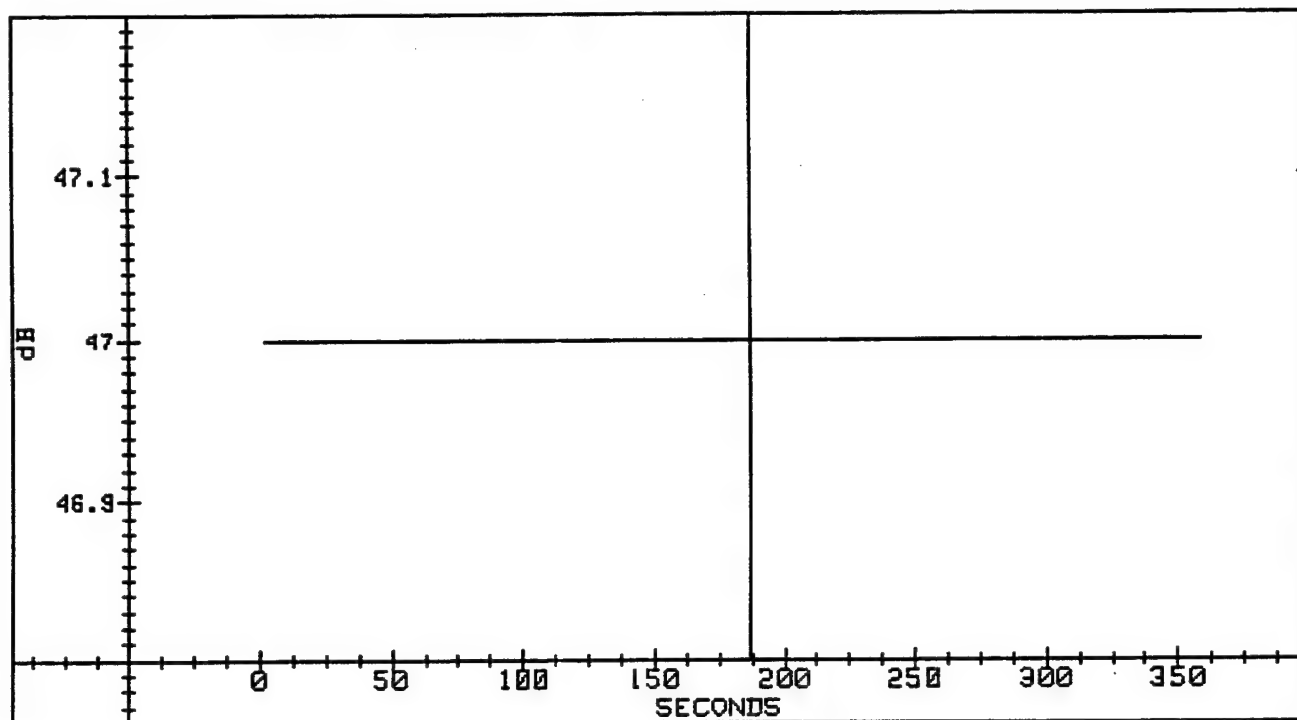
GPS Vv

DAY 178 TIME 1:43 PASS 23 $m = -.01474$, $sd = 1.04659$



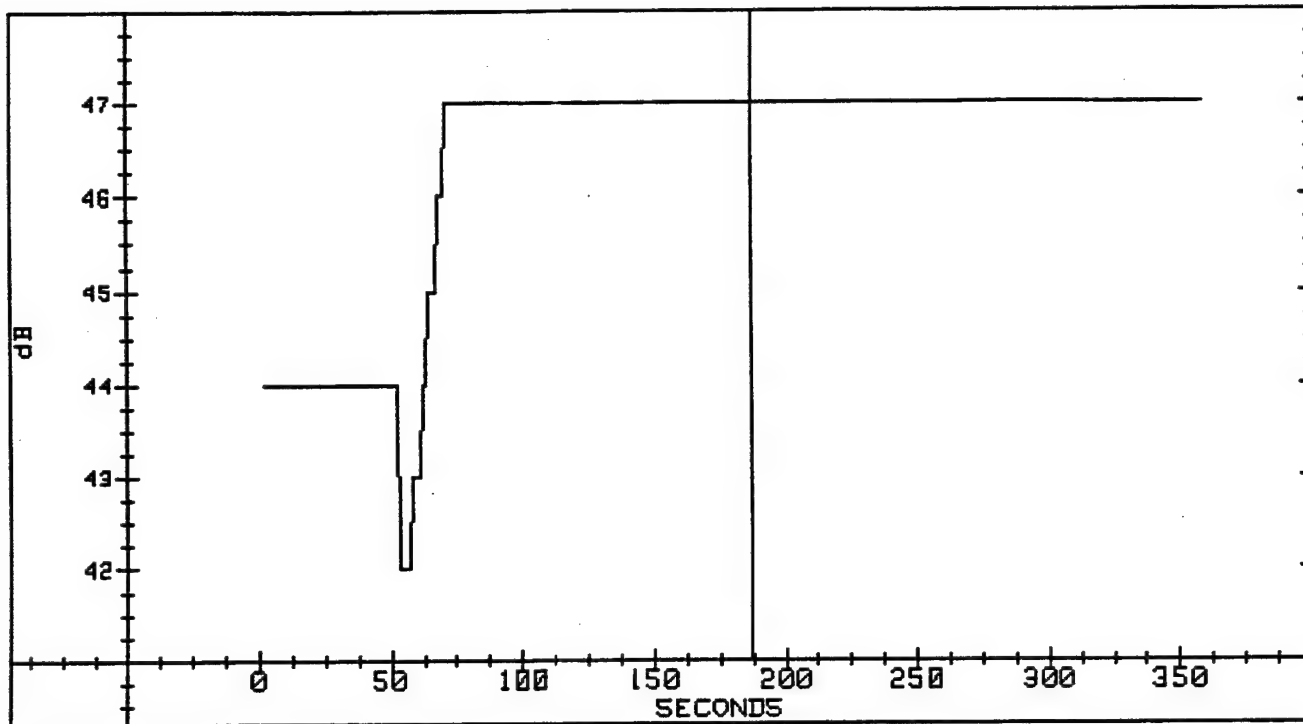
Ch1 RES Attenuation

DAY 178 TIME 1:43 PASS 23 m= 47, sd= 0



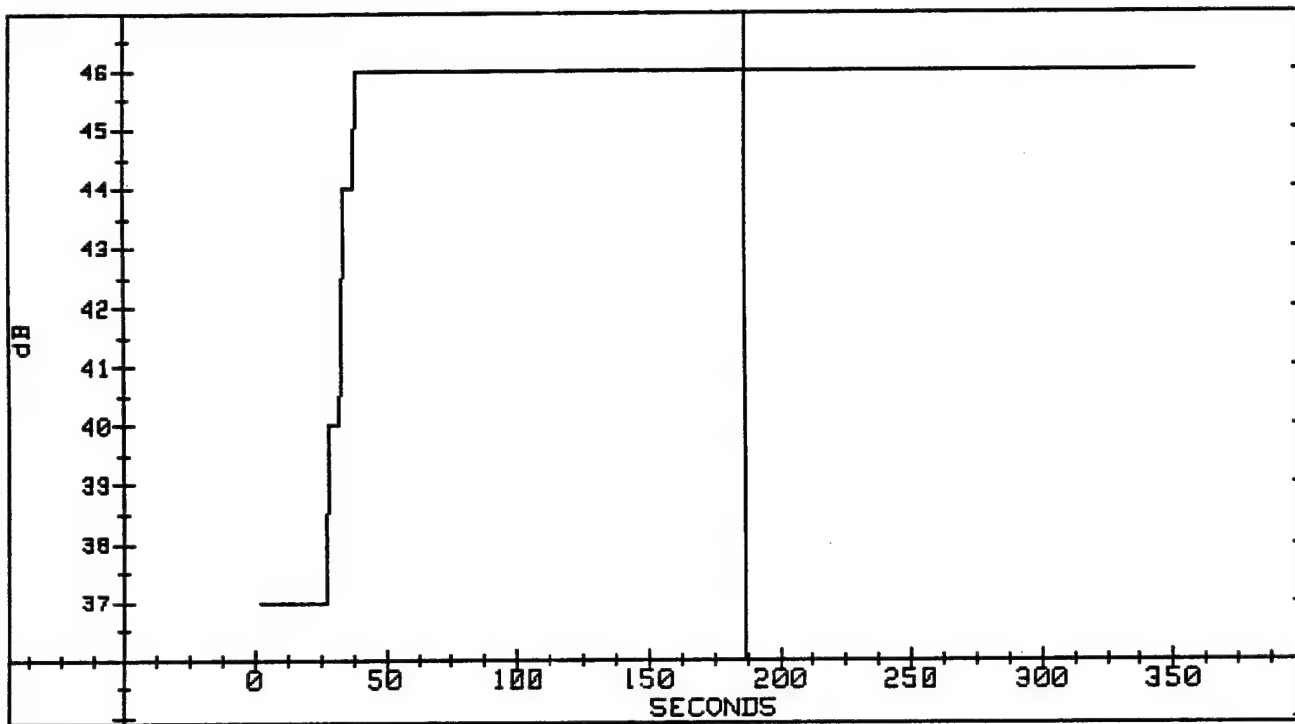
Ch2 RES Attenuation

DAY 170 TIME 1:43 PASS 23 m= 47. sd= 0



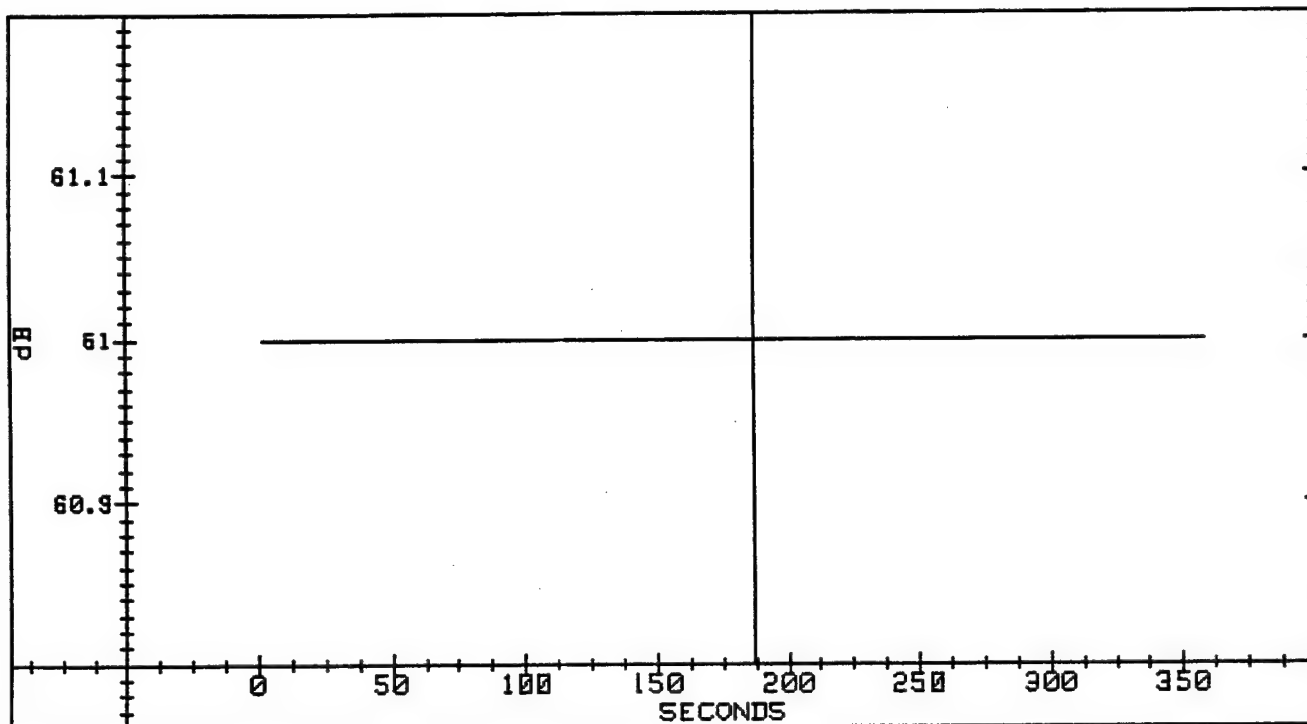
Ch3 RES Attenuation

DAY 170 TIME 1:43 PASS 23 m= 46, sd= 0



Ch4 RES Attenuation

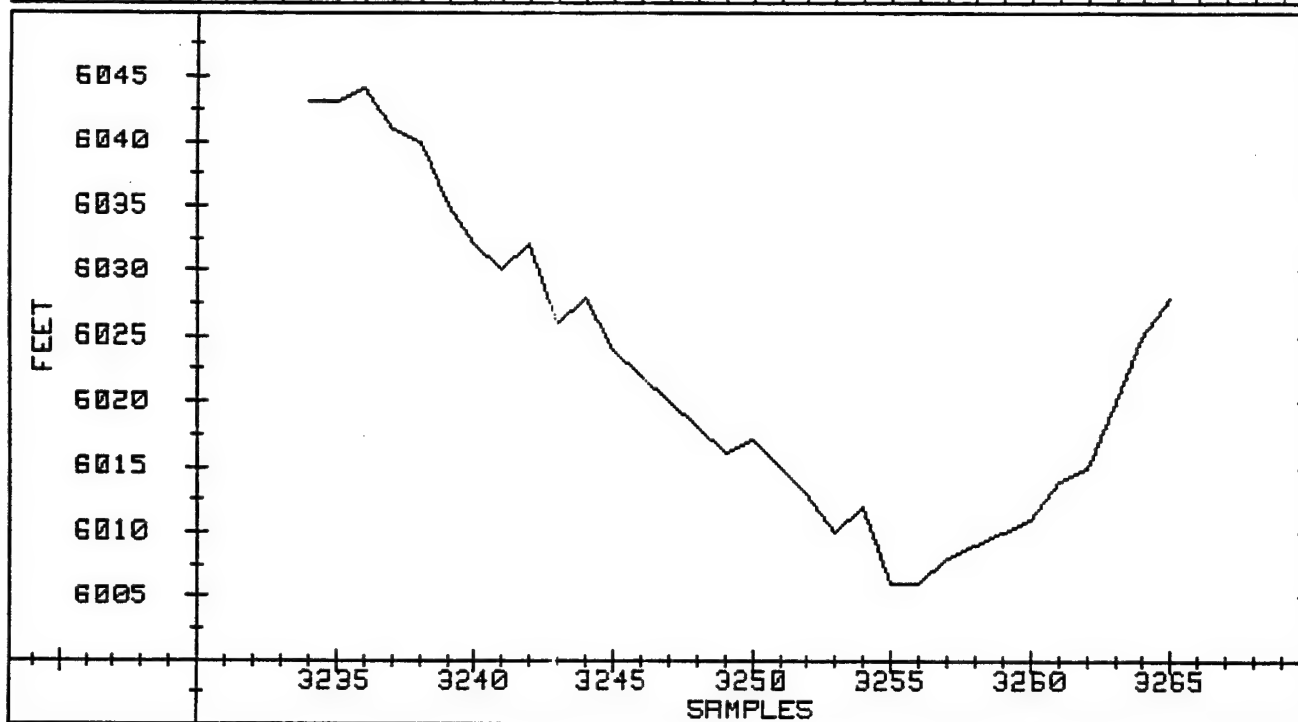
DAY 170 TIME 1:43 PASS 23 m= 61, sd= 0



GPS ALTITUDE

MEAN= 6022.28 STANDARD DEVIATION= 11.5873

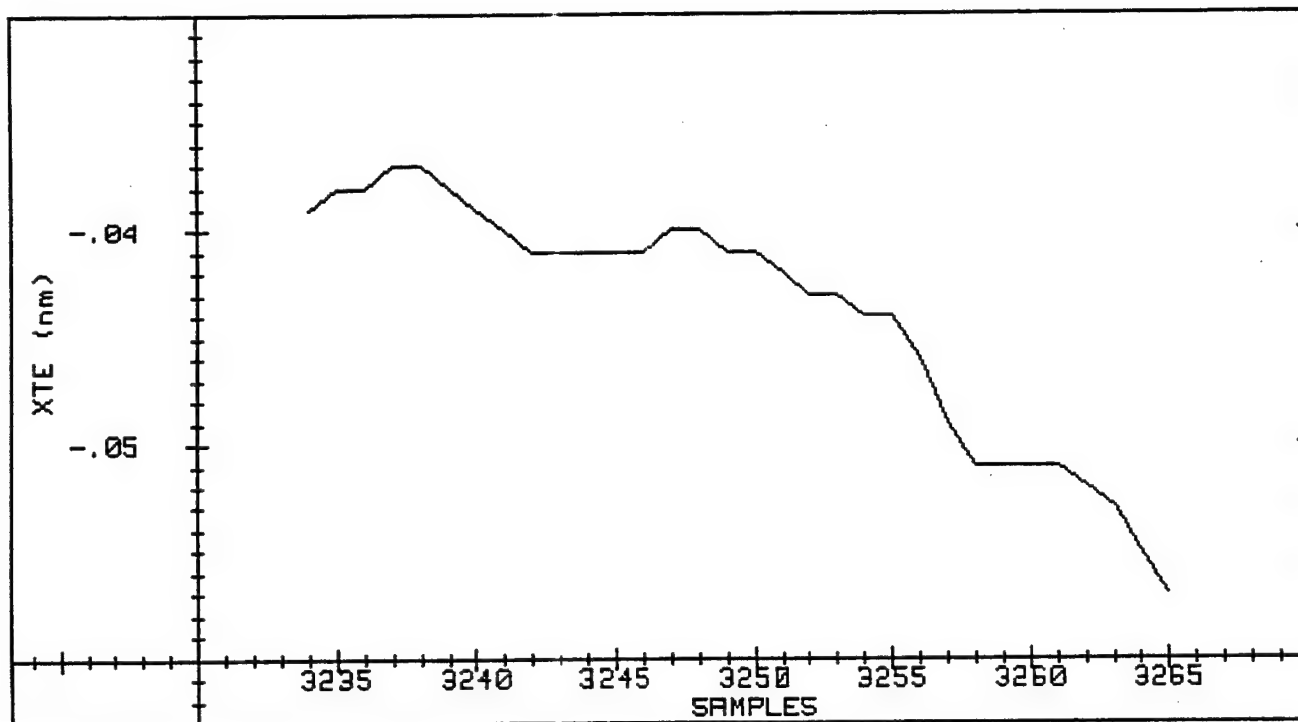
DATE: June 26, 1995 PASS 23

OFF
ON
BAR

GPS Cross Track Error

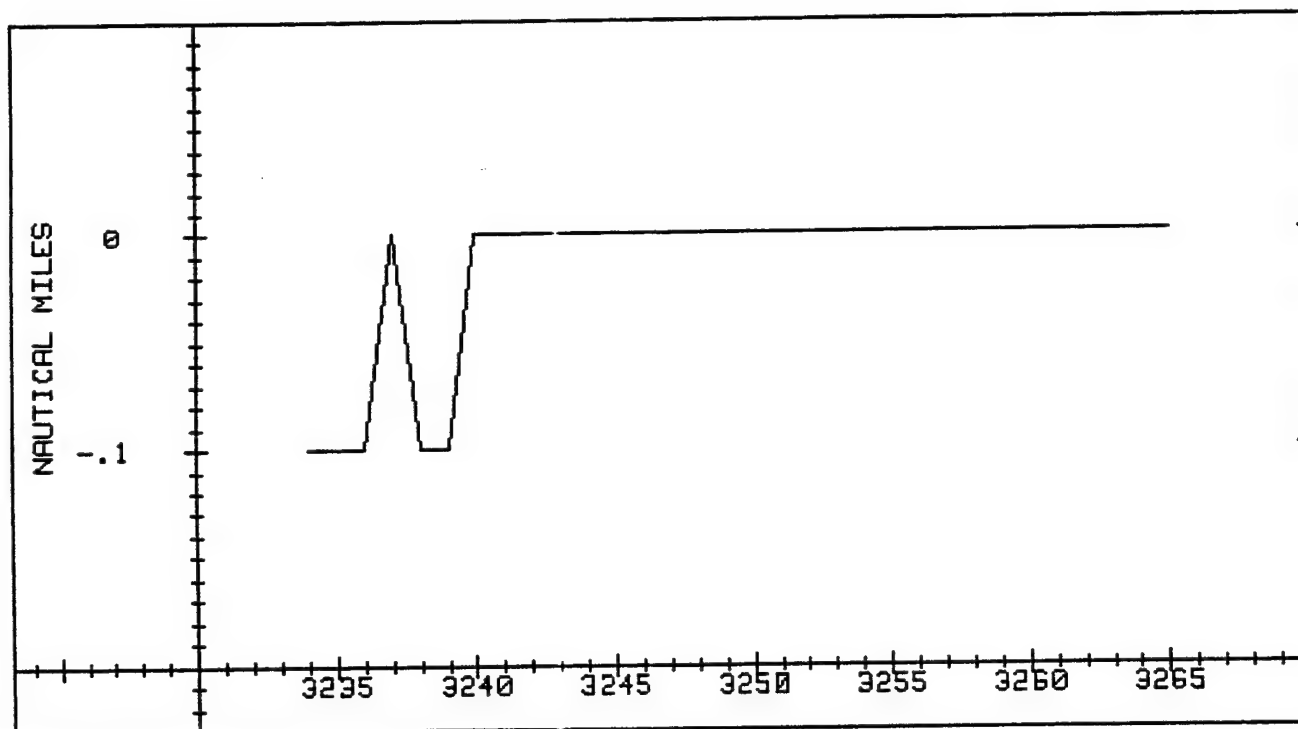
MEAN= -.0439063 STANDARD DEVIATION= .00568089

DATE: June 26, 1995 PASS 23

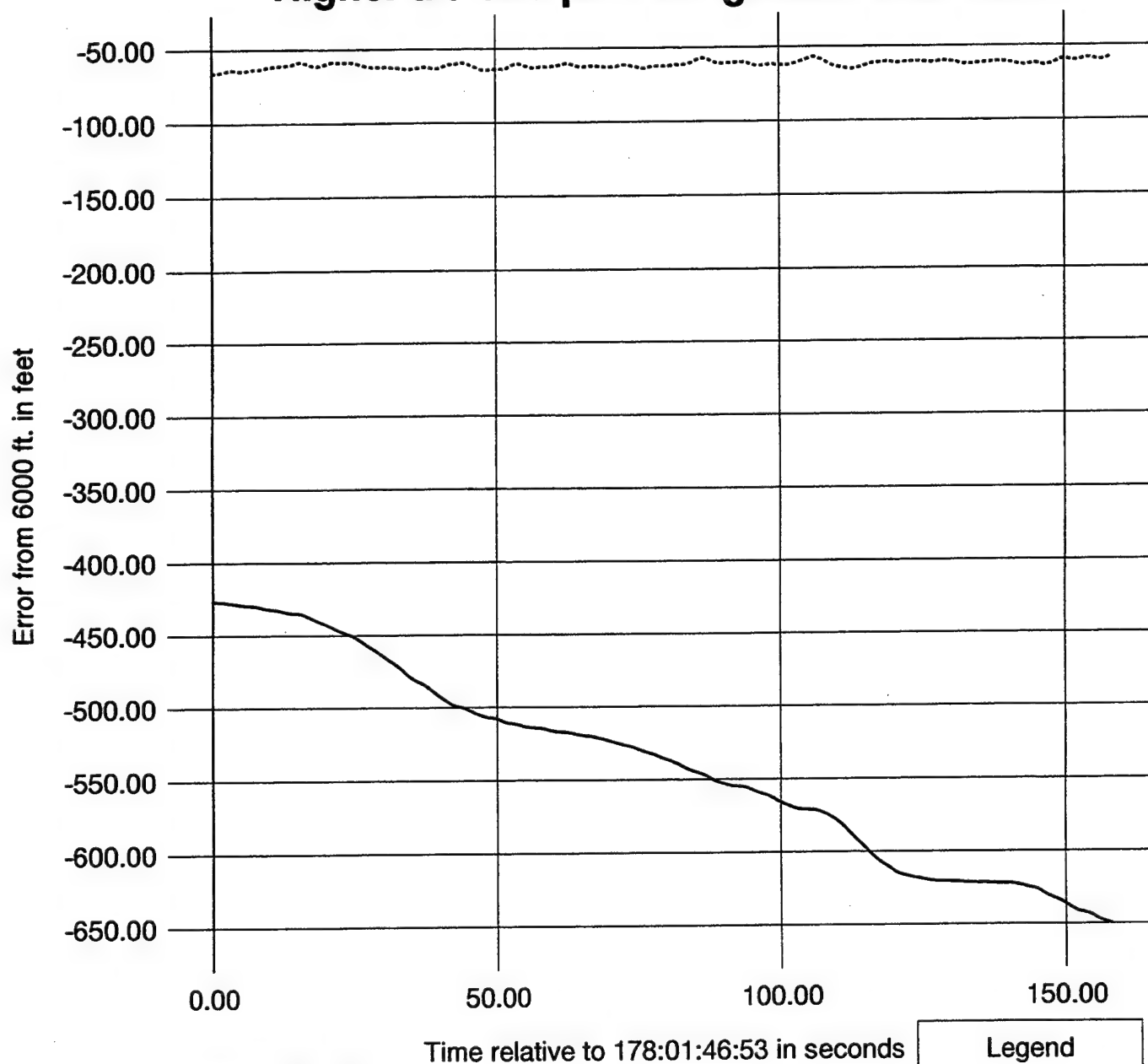


INS CROSS TRACK ERROR

MEAN- -.015625 STANDARD DEVIATION- .0363092
DATE: June 26, 1995 PASS 23



Portage, ME - June 26, 1995 - Pass 23 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



	Mean	St. Dev.
ALT.	-61.48	1.72
XTK.	-538.93	67.46

Legend	
—	P5-xt
.....	P5-alt

27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 43
Mission: PORTAGE MAINE, DAY

Time: 178:01:58:31
Pass 24
Req.# 23

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	6000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	5840 ft s.d.=	4 Swath Ctr Ang:	15.0°	15.0°	15.0°	15.0°
Slt. rng:	20632 ft	Tgt Dep Ang:	15.0°	15.0°	15.0°	15.0°
Look:	Right	St rng (ft):	19097	19097	19097	19097
Depr Ang:	25.0°	Near Rng Dep:	17.8°	17.8°	17.8°	17.8°
Des. trk:	306.0°	Far Rng Dep:	9.5°	9.5°	9.5°	9.5°
Start Sq:	90.0°	Atten (dB):	47.0	44.0	42.0	61.0
End Sq:	90.0°	RMS Video (%FS)	26.0	24.3	28.1	25.0

WAYPOINTS

Line_up:	N 46:32.06	W 68:13.43	Main Target:	GP
Start:	N 46:39.14	W 68:27.49	Mocomp Point:	
End:	N 46:45.01	W 68:39.25	Lat:	N 46:44.73
			Long:	W 68:30.56
From:	N 35:33.93	W 52:01.04	Tgt Trk:	0.0
To:	N 54:22.37	W 91:55.52	Tgt Vel:	0.0
			Alt:	660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel:	1	Filter damping is Hi	->	10 sec	
Resolution:	N/A	PRF Factor is FAST	(262.5 kts)		
Swath width:	Single	Ave Gndspd:	Real	->	244.8 kts
RMS Time Constant:	2^7	Mocomp Off for Chnl	1, 2, 3, 4		
Position Reference:	ON	GPS Vel/Pos Reference			
Atten. Tracking:	OFF	Adj Gnd Scene:	5000.0 ft		
Range Gate Delta:	0.0 ft	Range Tracking is	OFF		
Azimuth Presum Rate:	Presum6	Clutterlock Reference:	OFF		
TX Chirp Filename:	CTL1U2B	RX Chirp Filename:	CRL1N0A		

Ave Ref Vel -> -1.2 fps (s.d.= 1.4)
Ave Fil Vel -> -2.7 fps (s.d.= 1.3)

NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation:	Starting:	7725 ft (1)
L: -70.0	Azimuth:	Ending:	8993 ft (1)
C: -70.0	Pitch:		
P: 46.1			

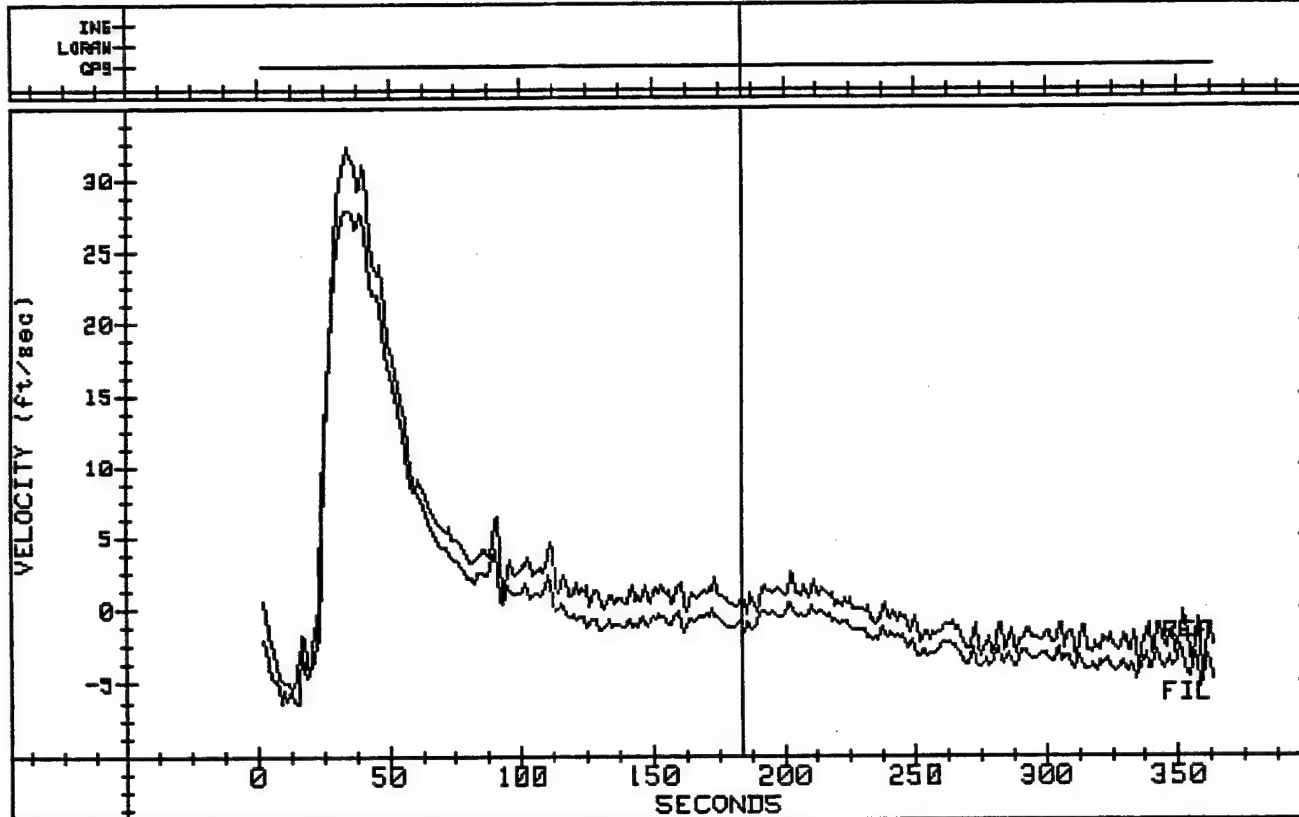
Vel Bias	CAL Atten	LINE Map Time (UCT)
X: 1035.0	X: 63.8 dB	Start: 01:58:31
Y: -433.0	L: 63.8 dB	End: 02:01:16
Z: 6697.0	C: 63.8 dB	

Mocomp Counters

Start: 1376501 001500F5h
End: 1404168 00156D08h

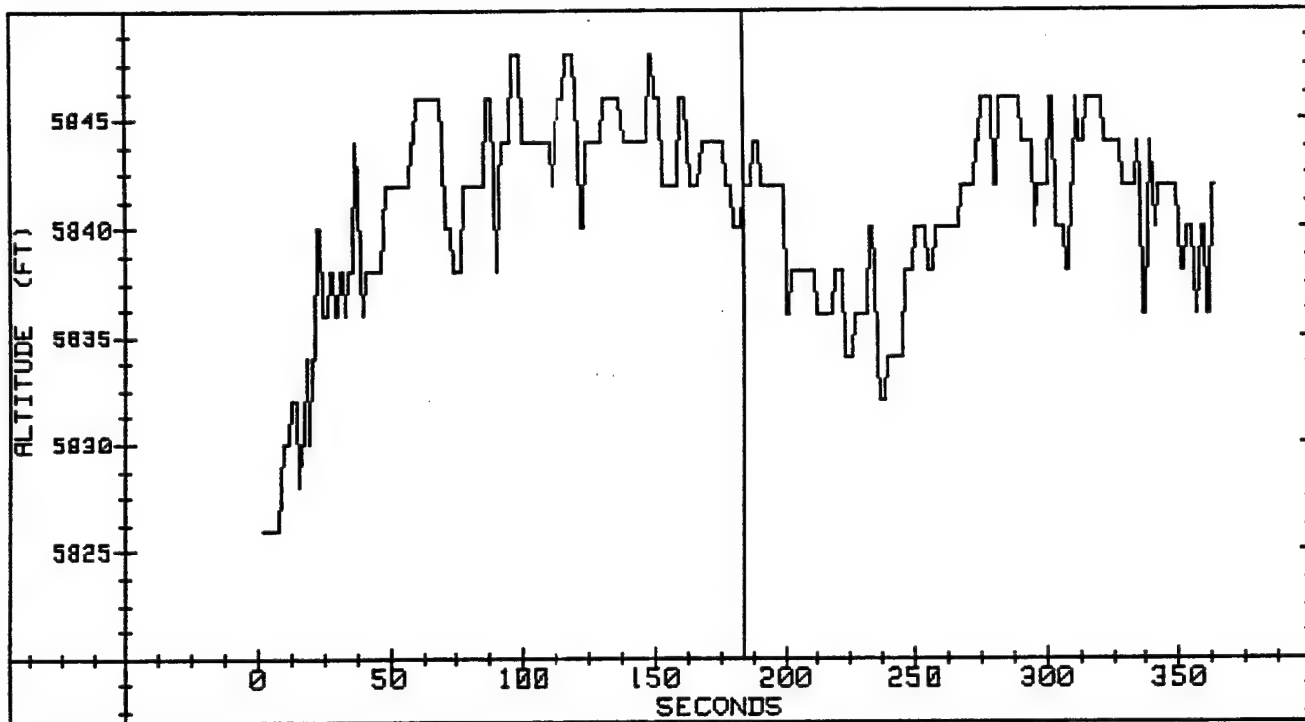
CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 170 TIME 1:55 PASS 24



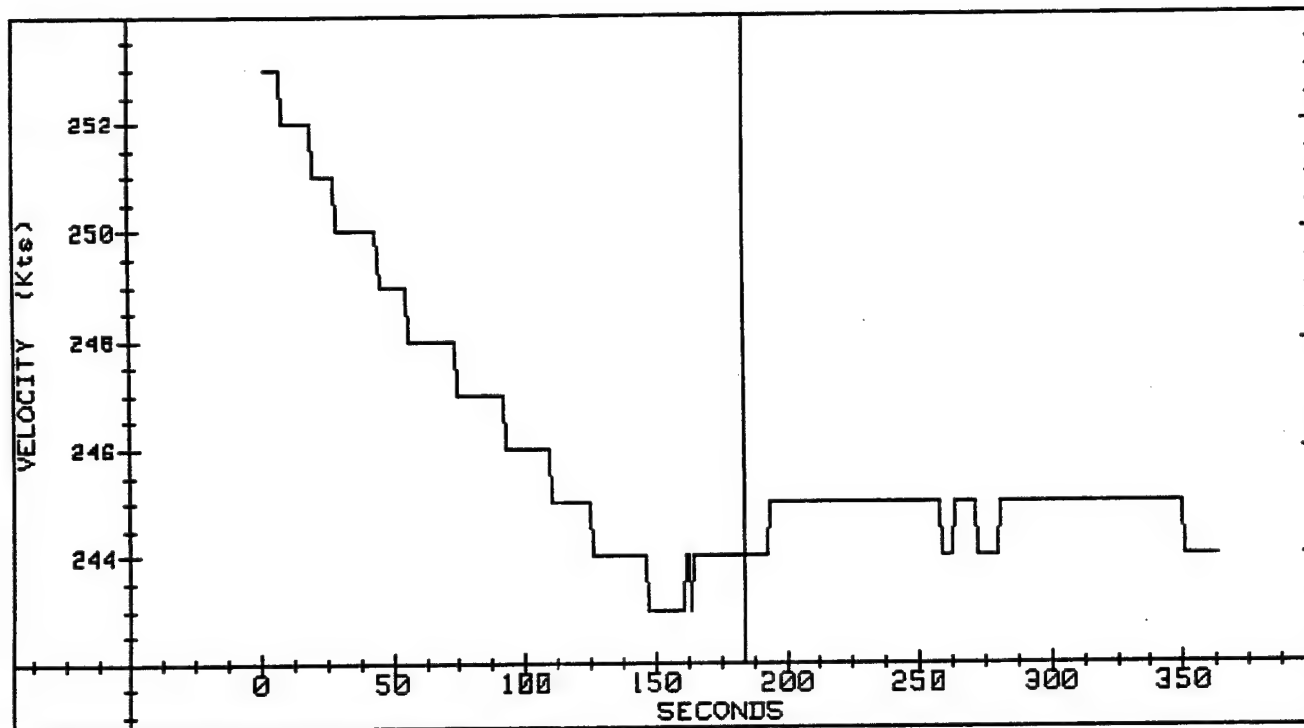
BARO ALTITUDE

DAY 178 TIME 1:55 PASS 24 m= 5840, sd= 3.72102



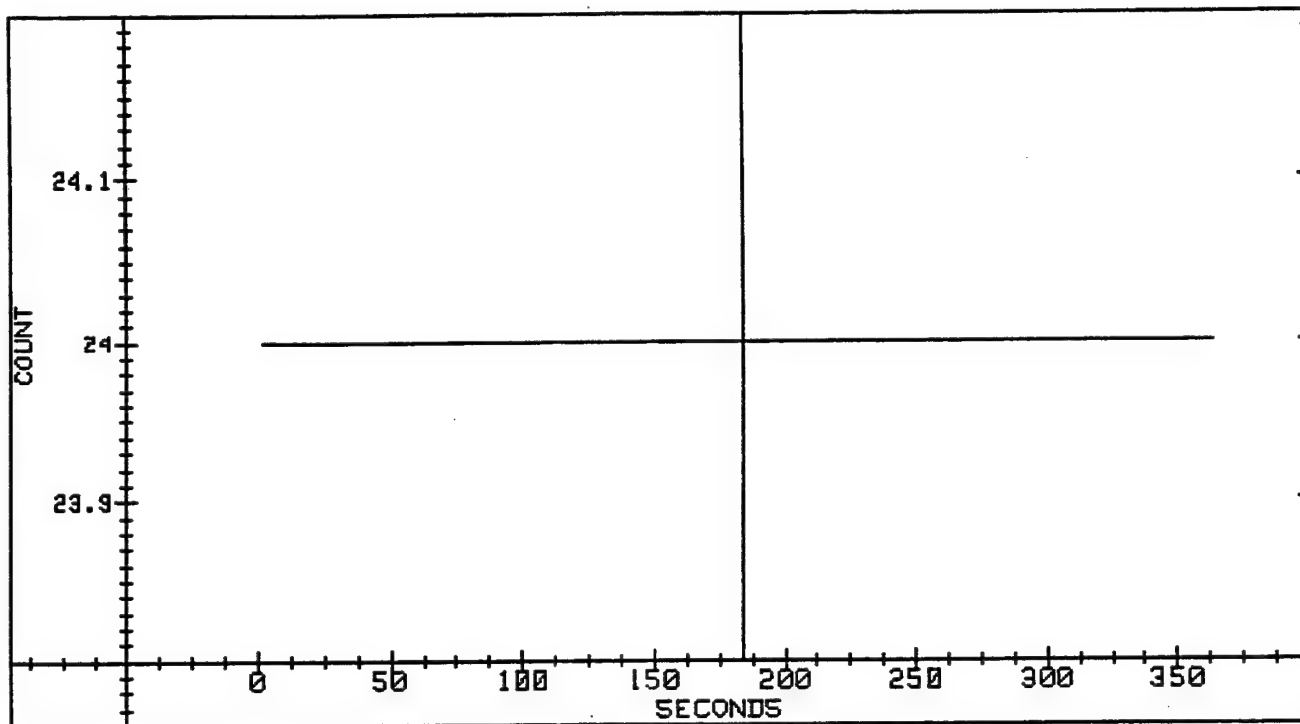
INS GROUND SPEED

DAY 178 TIME 1:55 PASS 24 m= 244.8, sd= .363448



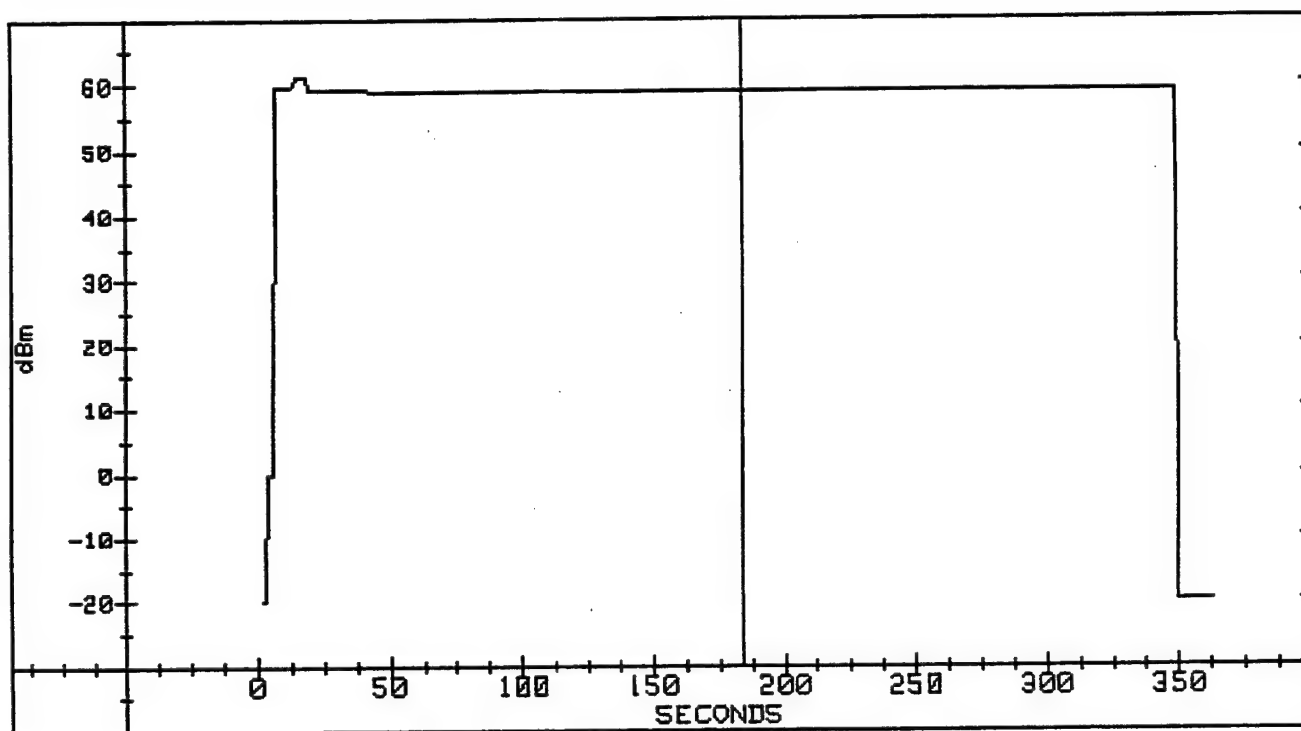
PASS NUMBER

DAY 170 TIME 1:55 PASS 24 m- 24. sd- 0



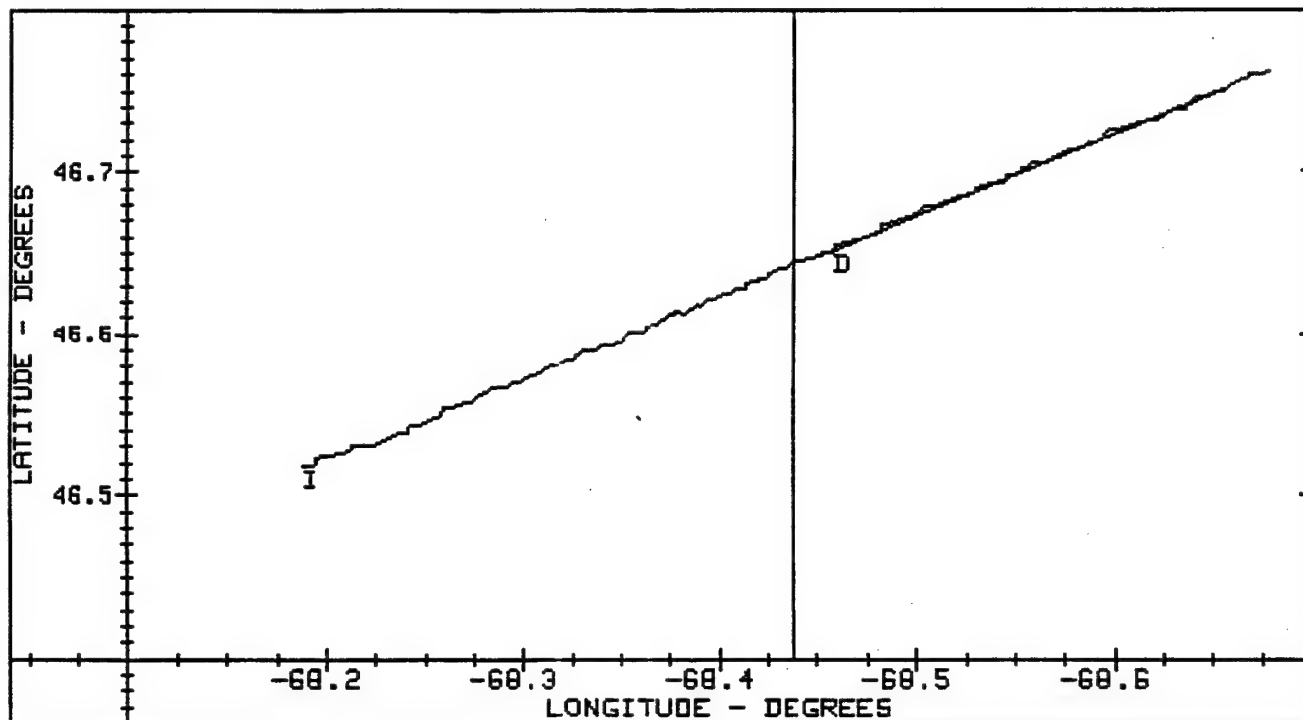
P Band Power

DRY 178 TIME 1:55 PASS 24 m= 52.22, sd= 21.9169



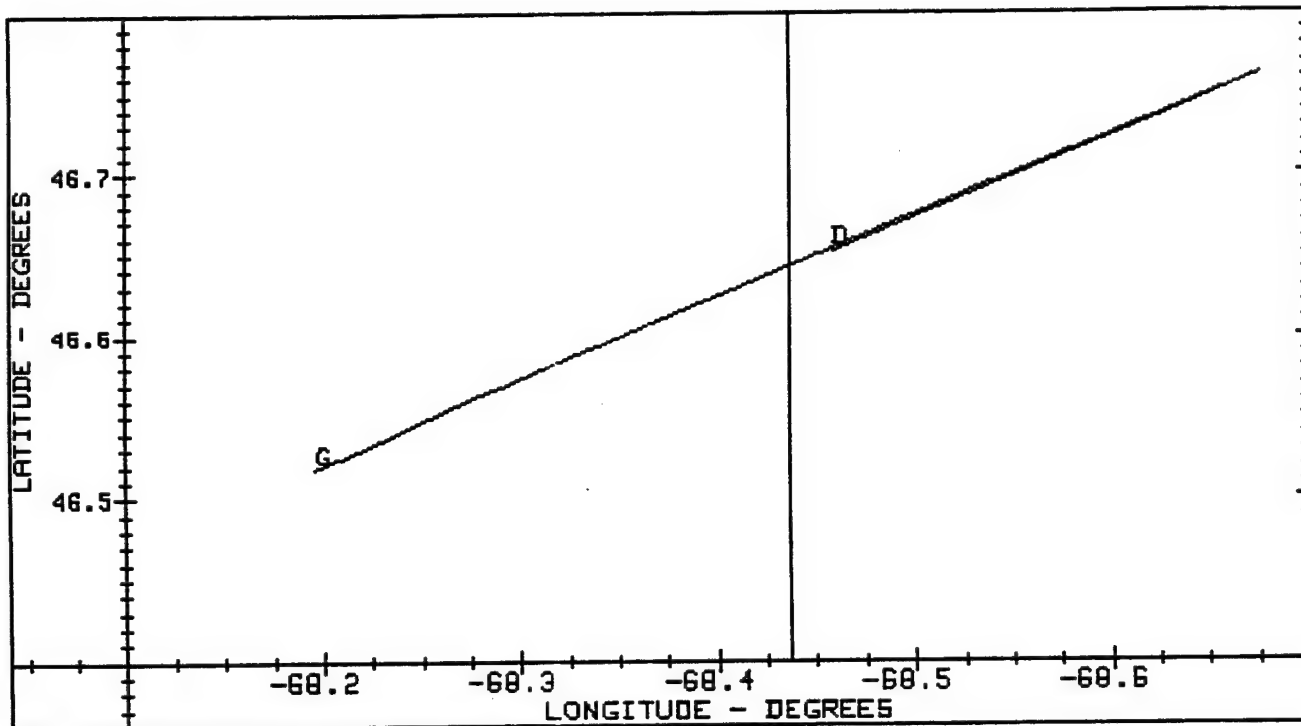
INS AIRCRAFT POSITION

DAY 170 TIME 1:55 PASS 24



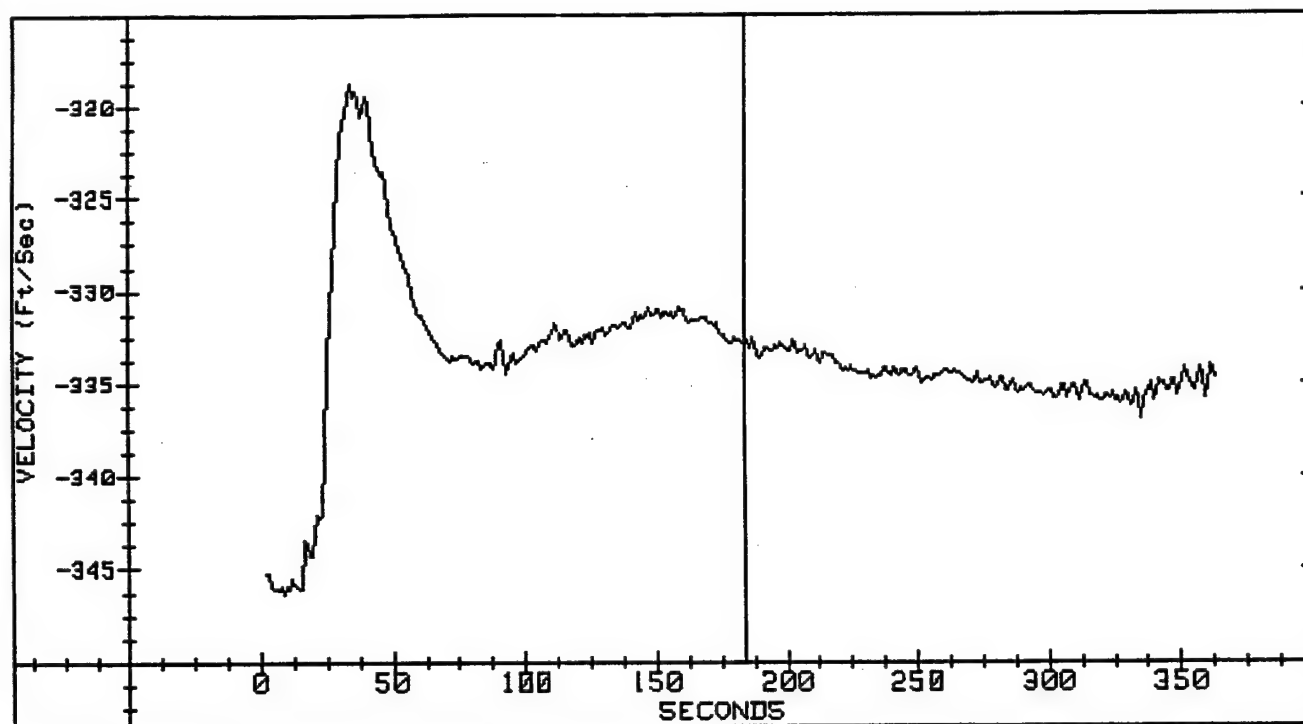
GPS AIRCRAFT POSITION

DAY 178 TIME 1:55 PASS 24



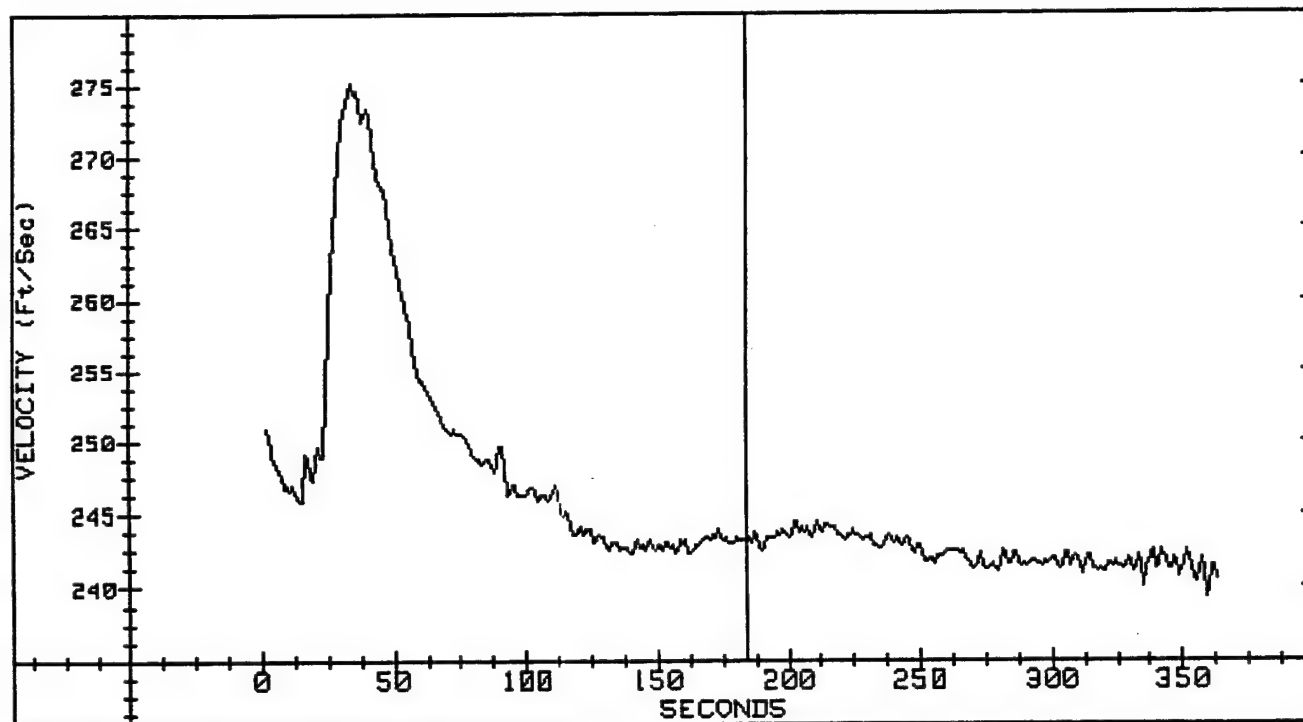
GPS V_e

DAY 170 TIME 1:55 PASS 24 m= -334.8, sd= .004199



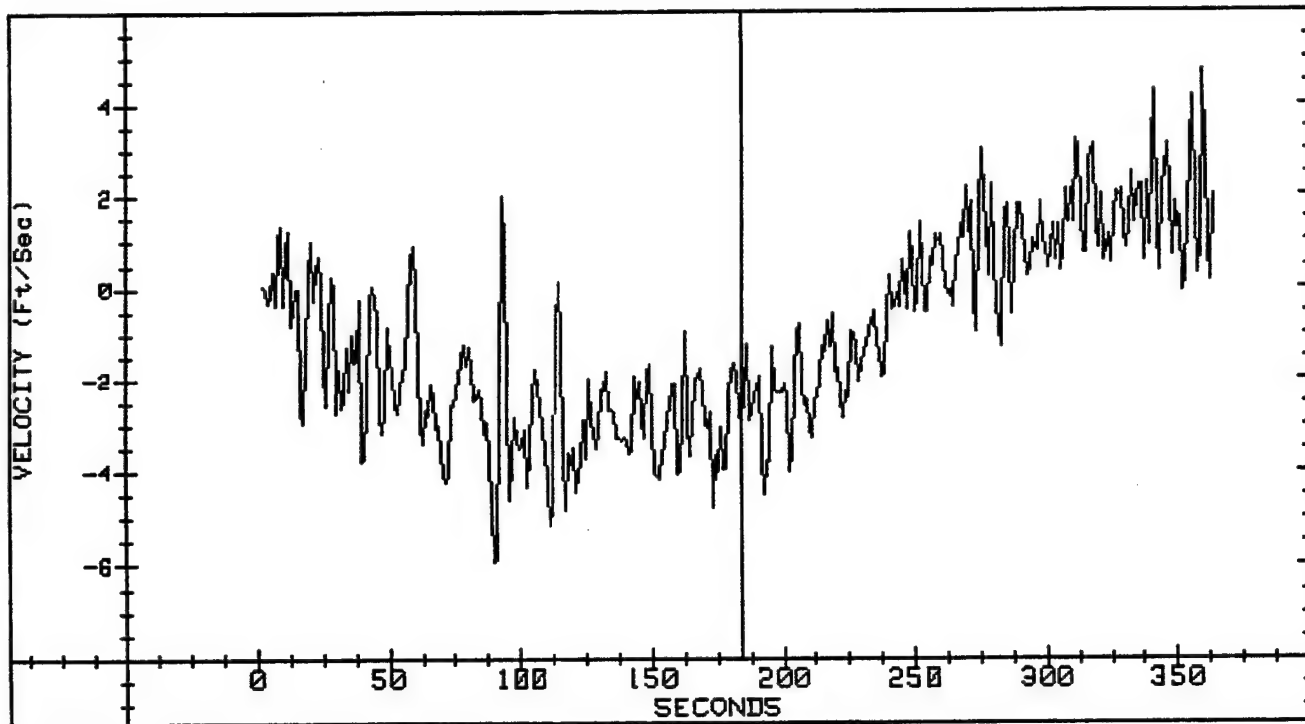
GPS Vn

DRY 178 TIME 1:55 PASS 24 m= 242.3, sd= 1.01651



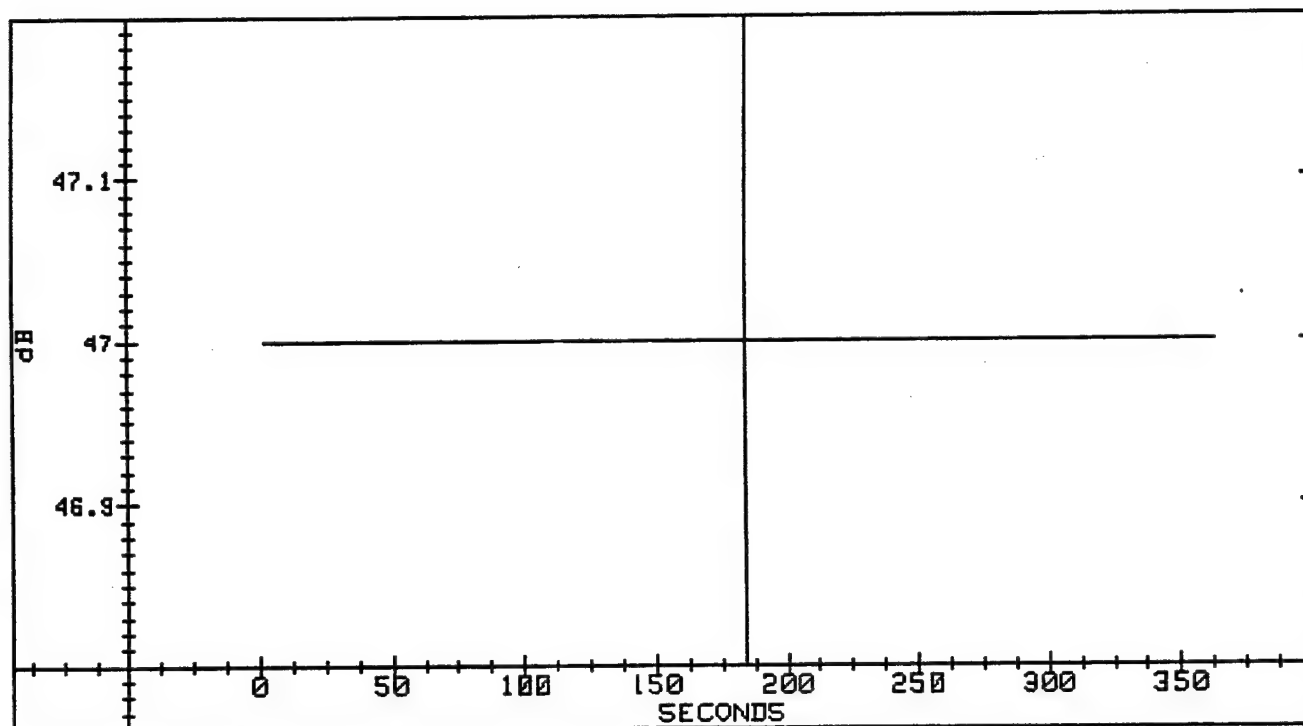
GPS Vv

DRY 178 TIME 1:55 PASS 24 m= .4106, sd= 1.68132



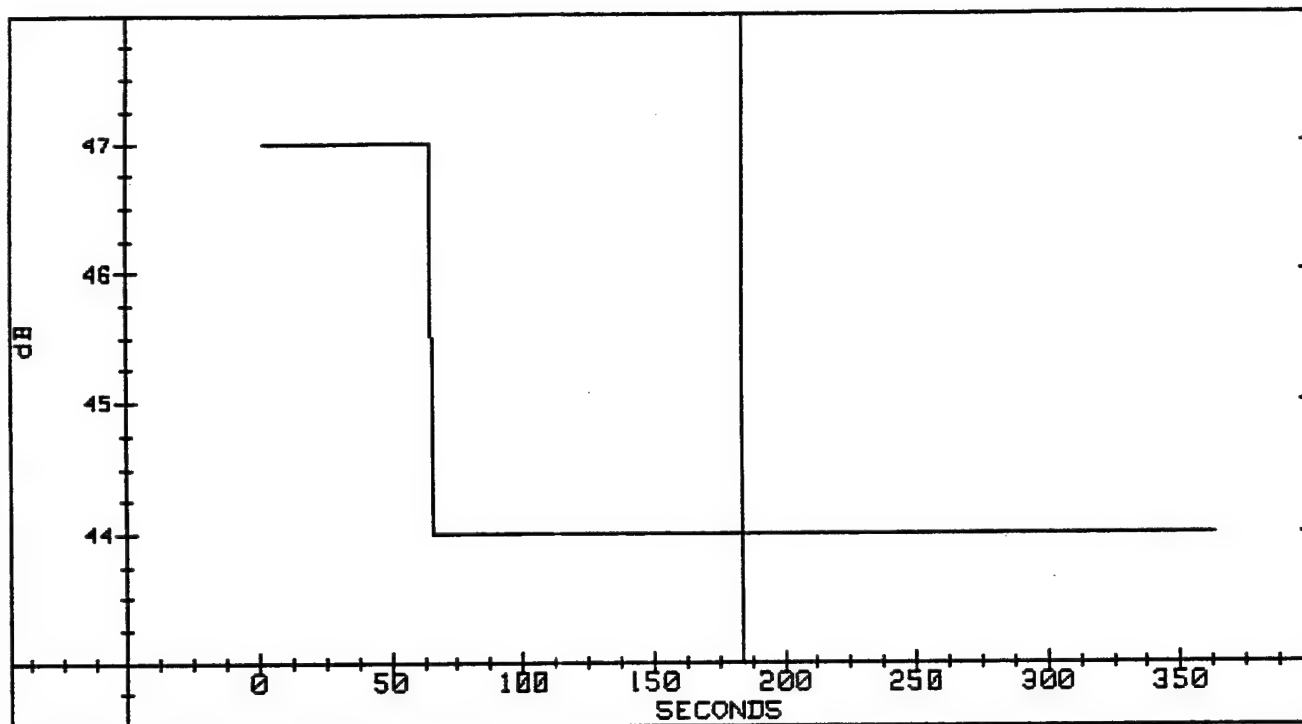
Ch1 RES Attenuation

DAY 178 TIME 1:55 PASS 24 m= 47. sd= 0



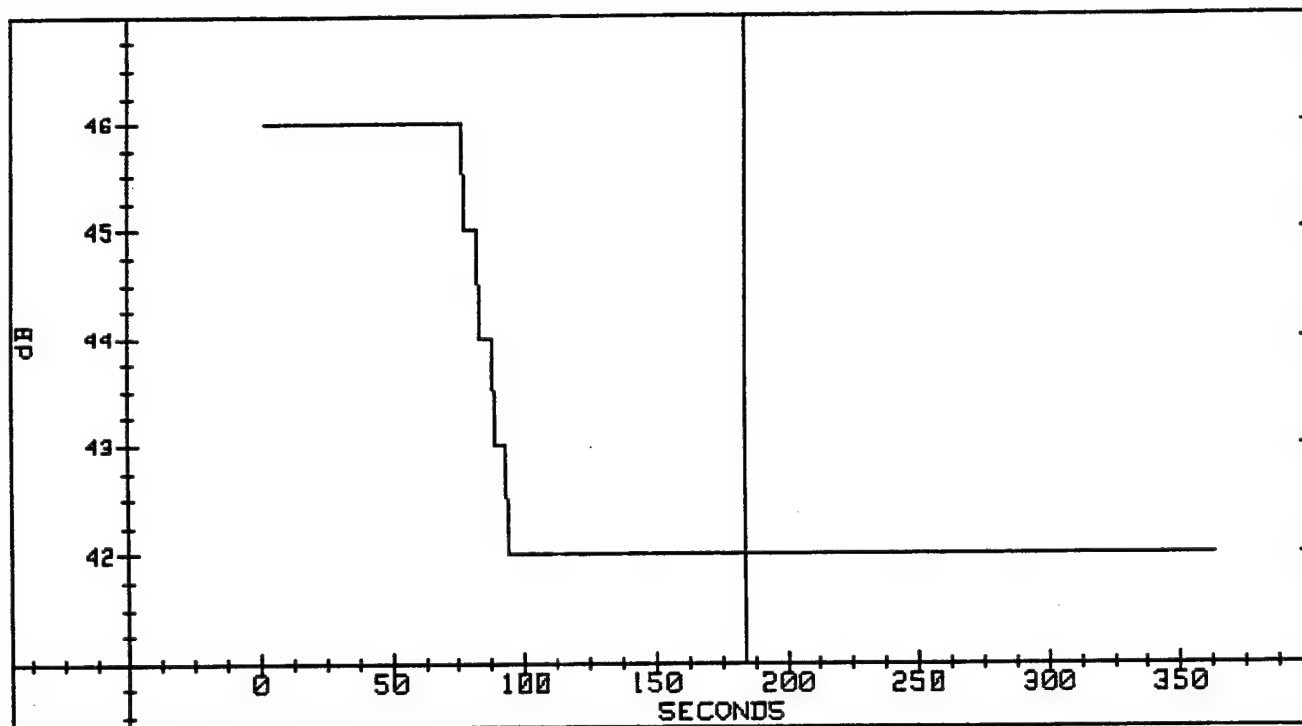
Ch2 RES Attenuation

DAY 170 TIME 1:55 PASS 24 m= 44. sd= 0



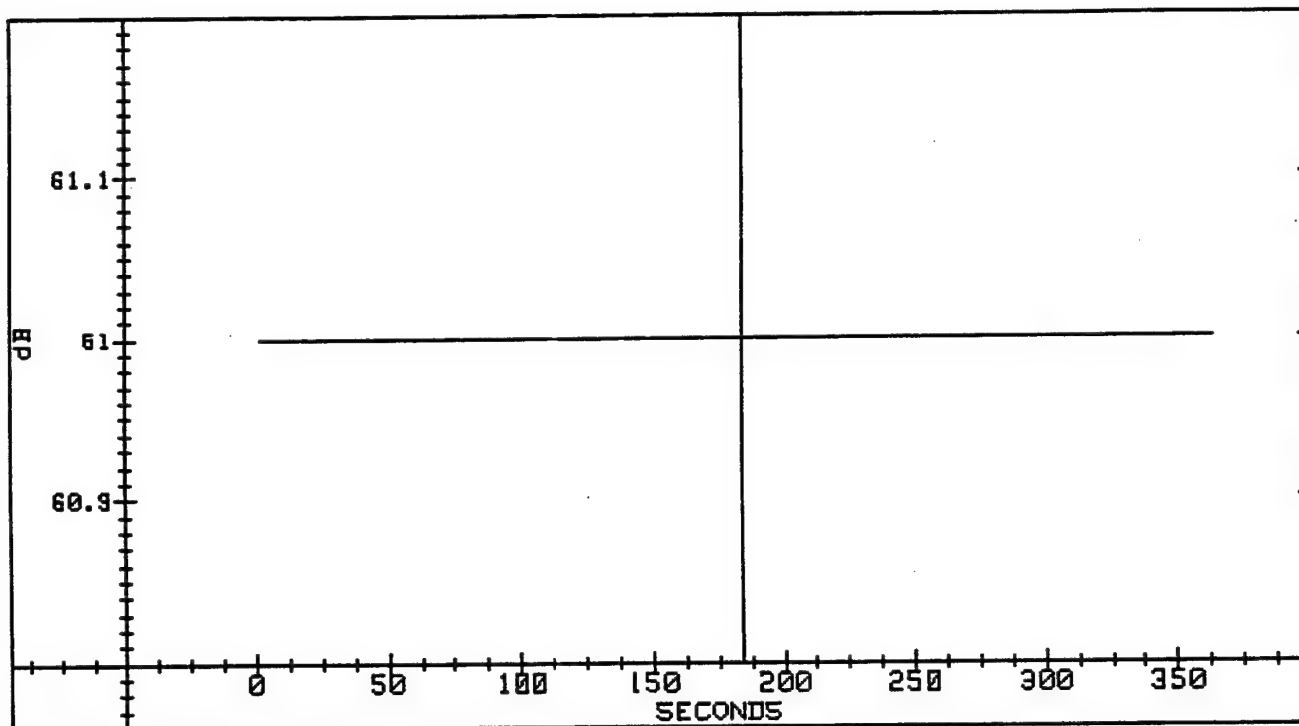
Ch3 RES Attenuation

DAY 178 TIME 1:55 PASS 24 m= 42, sd= 0



Ch4 RES Attenuation

DAY 178 TIME 1:55 PASS 24 m= 61. sd= 0

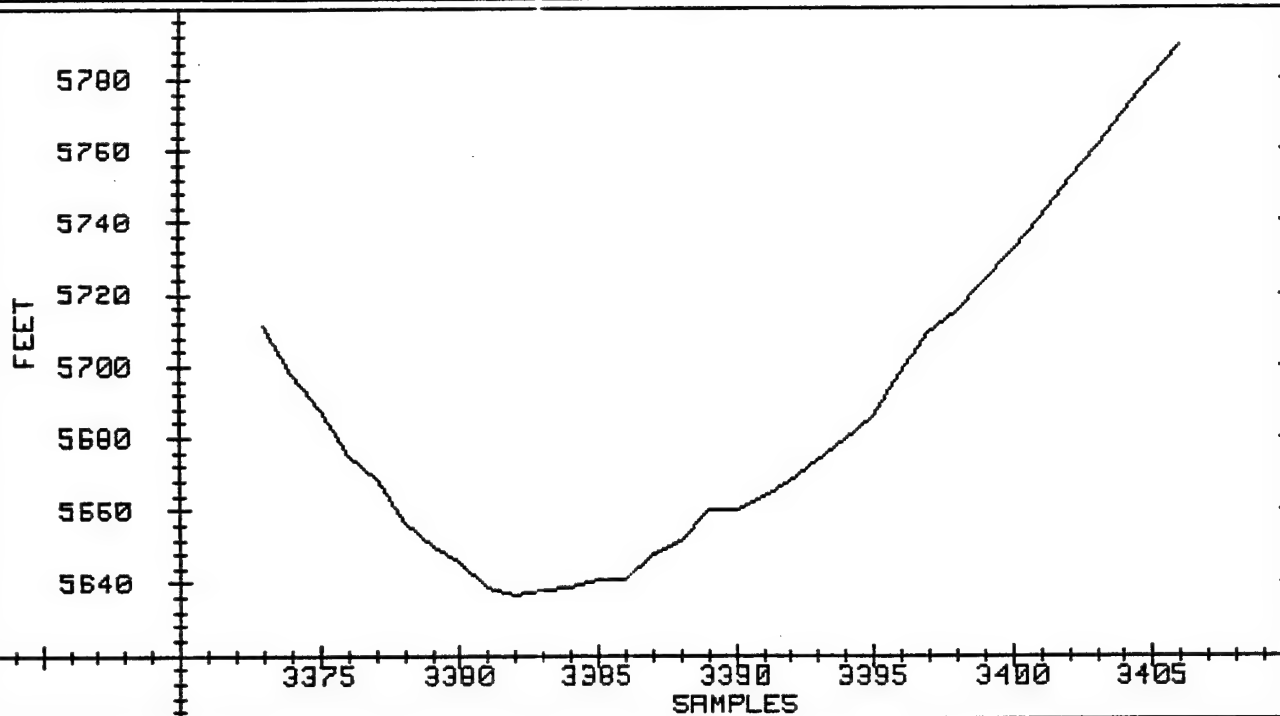


GPS ALTITUDE

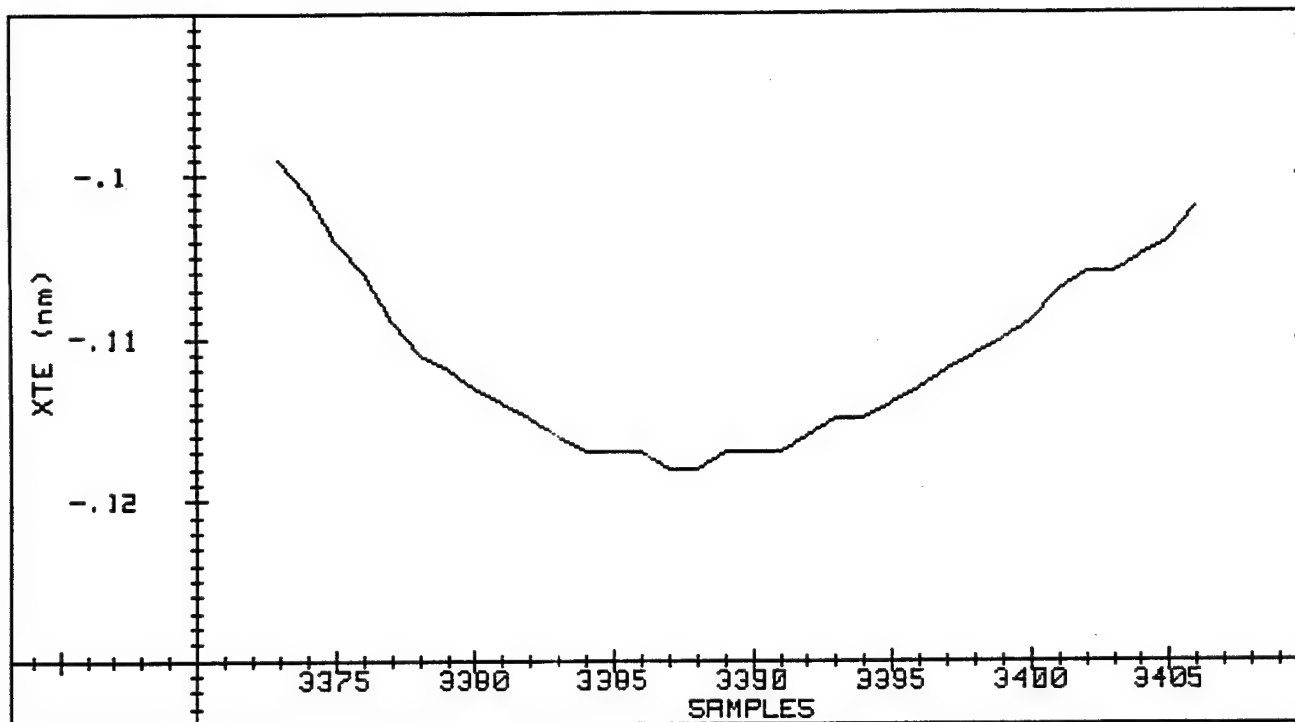
MEAN= 5687.94 STANDARD DEVIATION= 44.5315

DATE: June 26, 1995 PASS 24

OFF
ON
BAR

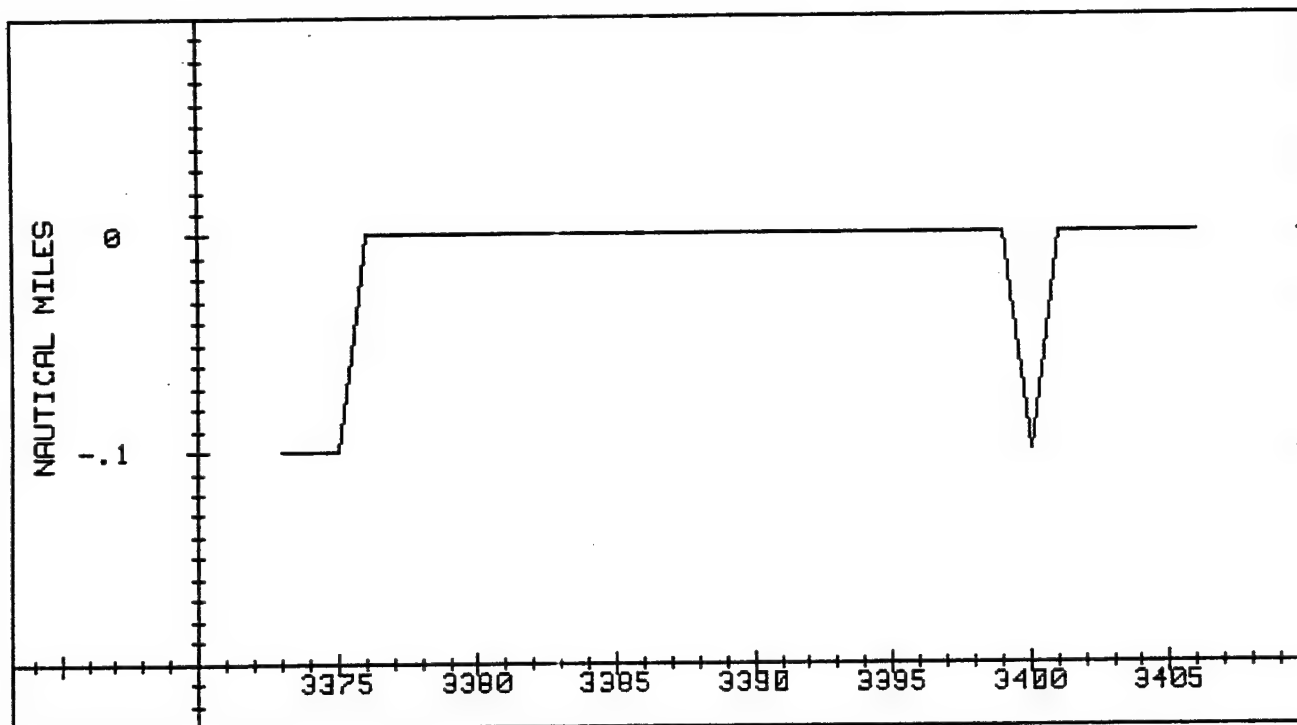


GPS Cross Track Error
MEAN= -.111265 STANDARD DEVIATION= .00541408
DATE: June 26, 1995 PASS 24

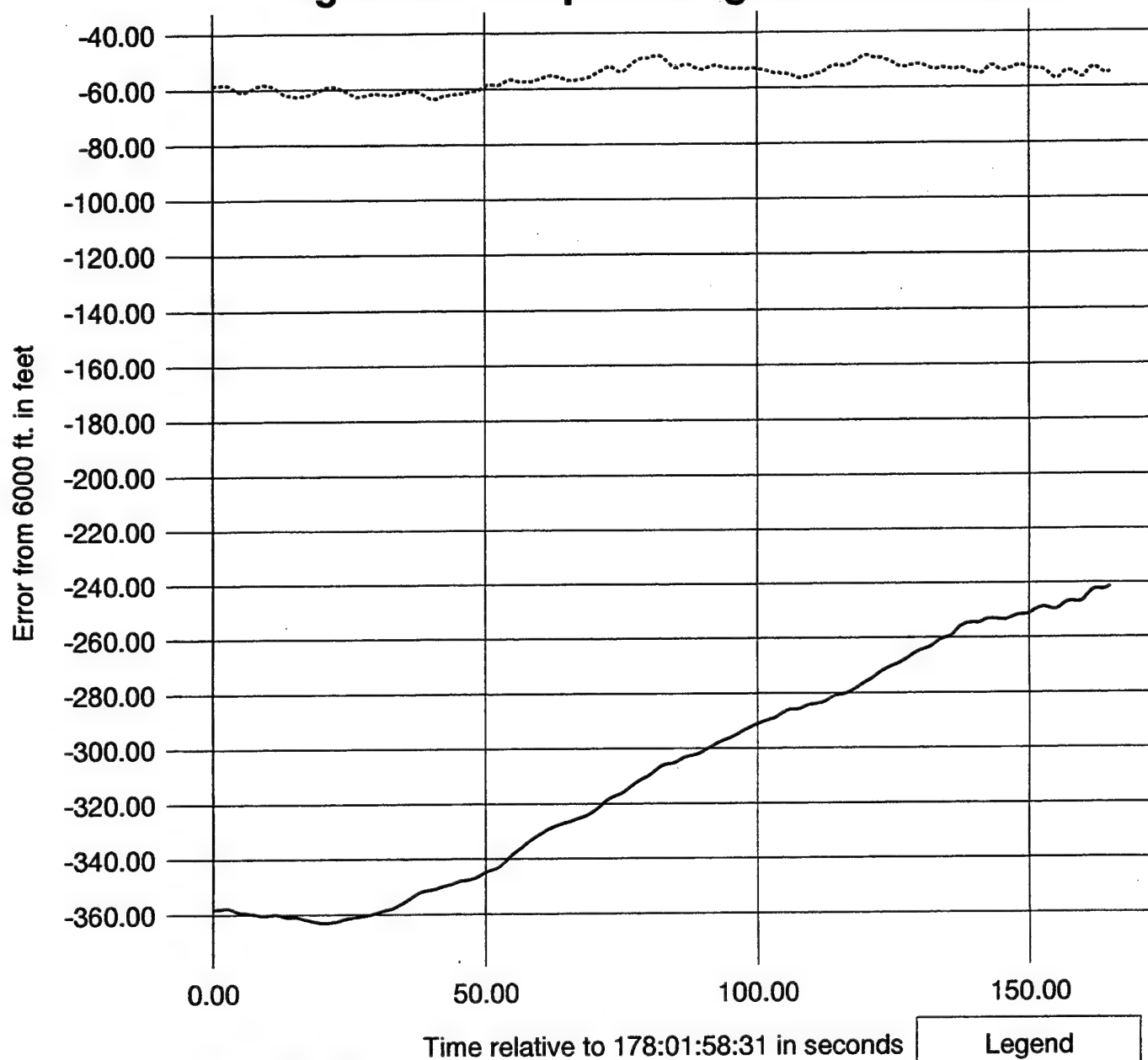


INS CROSS TRACK ERROR

MEAN= -.0117647 STANDARD DEVIATION= .032219
DATE: June 26, 1995 PASS 24



Portage, ME - June 26, 1995 - Pass 24 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



	Mean	St. Dev.
ALT.	-55.78	3.94
XTK.	-308.31	40.88

Legend	
—	P5-xt
.....	P5-alt

27 Jun 1995
Tape: E1423

Post-line Data Sheet
Line 45
Mission: PORTAGE MAINE, DAY

Time: 178:02:11:05
Pass 25
Req.# 24

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	6000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	5854 ft s.d.=	4 Swath Ctr Ang:	15.0°	15.0°	15.0°	15.0°
Slt. rng:	20632 ft	Tgt Dep Ang:	15.0°	15.0°	15.0°	15.0°
Look:	Right	St rng (ft):	19097	19097	19097	19097
Depr Ang:	25.0°	Near Rng Dep:	17.8°	17.8°	17.8°	17.8°
Des. trk:	126.0°	Far Rng Dep:	9.6°	9.6°	9.6°	9.6°
Start Sq:	90.0°	Atten (dB):	47.0	47.0	44.0	56.0
End Sq:	90.0°	RMS Video (%FS)	28.2	28.7	24.7	16.1

WAYPOINTS

Line_up:	N 46:57.33	W 68:47.84	Main Target:	GP
Start:	N 46:50.30	W 68:33.66	Mocomp Point:	
End:	N 46:44.43	W 68:21.89	Lat:	N 46:44.73
			Long:	W 68:30.56
From:	N 54:27.95	W 91:52.44	Tgt Trk:	0.0
To:	N 35:38.50	W 51:55.06	Tgt Vel:	0.0
			Alt:	660.0 ft

RADAR PARAMETERS - for UWB

RTP Channel:	1	Filter damping is Hi	->	10 sec
Resolution:	N/A	PRF Factor is FAST	(262.5 kts)	-
Swath width:	Single	Ave Gndspd:	Real	->
RMS Time Constant:	2^7	Mocomp Off for Chnl	1, 2, 3, 4	
Position Reference:	ON	GPS Vel/Pos Reference		
Atten. Tracking:	OFF	Adj Gnd Scene:	5000.0 ft	
Range Gate Delta:	0.0 ft	Range Tracking is	OFF	
Azimuth Presum Rate:	Presum6	Clutterlock Reference:	OFF	
TX Chirp Filename:	CTL1U2B	RX Chirp Filename:	CRL1N0A	
Ave Ref Vel ->	.2 fps (s.d.=	1.0)		
Ave Fil Vel ->	1.5 fps (s.d.=	.7)		

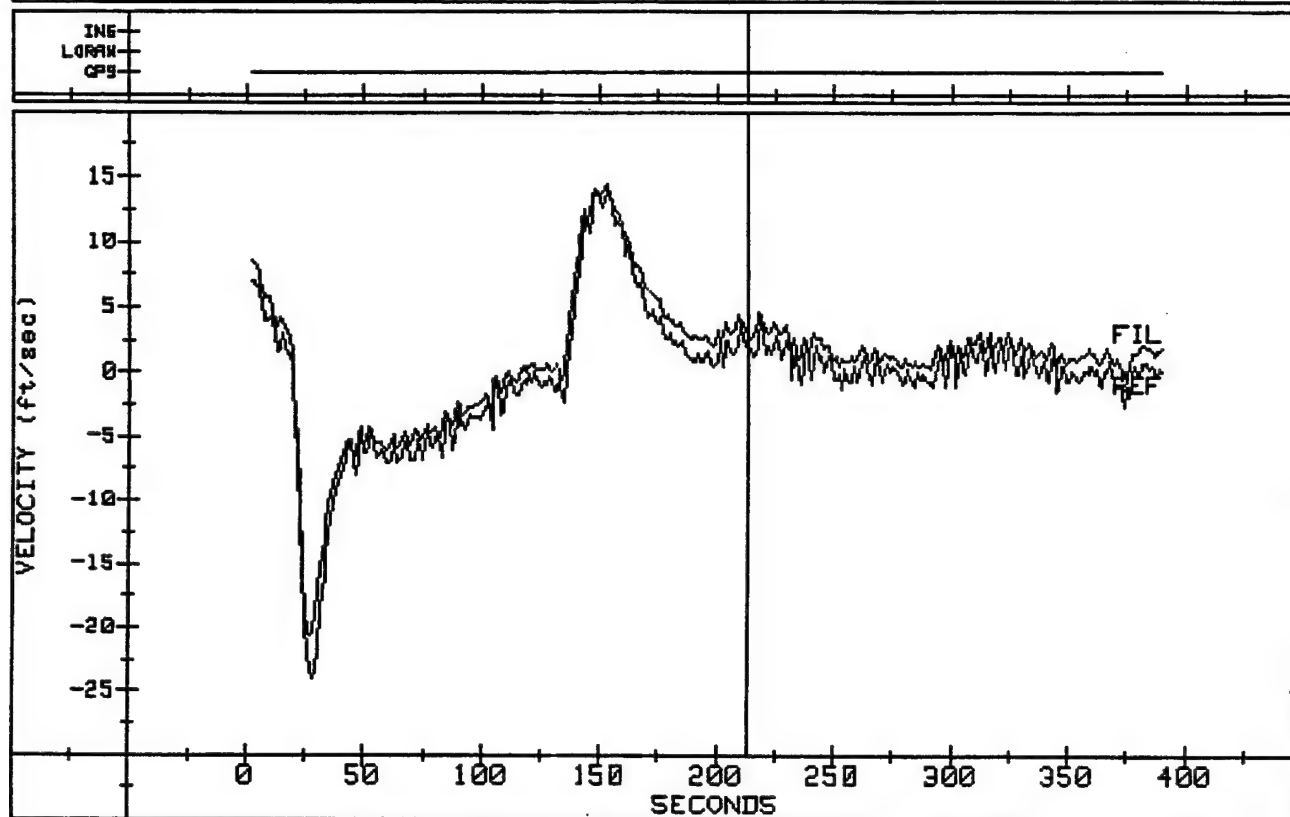
NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -70.0	Elevation:	0.0°	
L: -70.0	Azimuth:	0.0°	Starting: 9008 ft (1)
C: -70.0	Pitch:	0.0°	Ending: 10264 ft (1)
P: 46.3			

Vel Bias	CAL Atten	LINE Map Time (UCT)
X: 1035.0	X: 63.8 dB	Start: 02:11:05
Y: -433.0	L: 63.8 dB	End: 02:13:47
Z: 6697.0	C: 63.8 dB	

Mocomp Counters

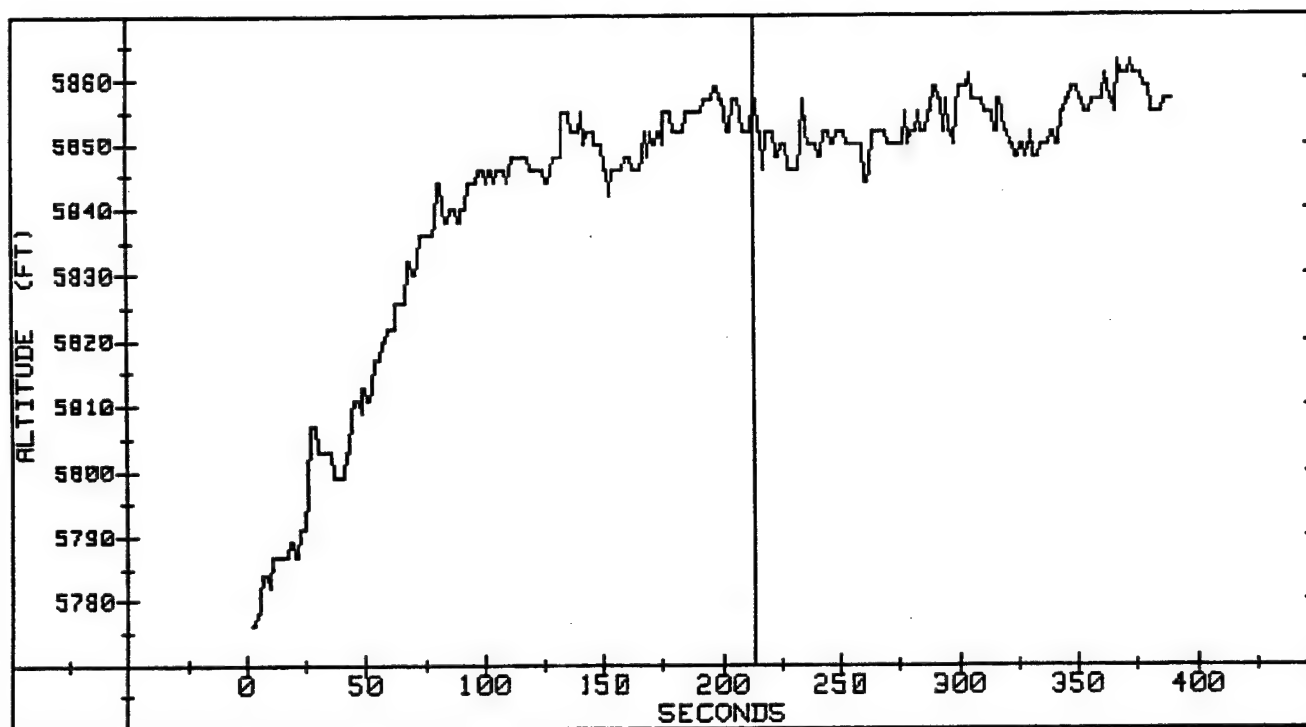
Start:	1442390	00160256h	CPA (UCT):	00:00:00
End:	1469537	00166C61h	Alt:	0 ft (GPS)
			Lat:	N 0:00: 0
			Lon:	E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 178 TIME 2:7 PASS 25



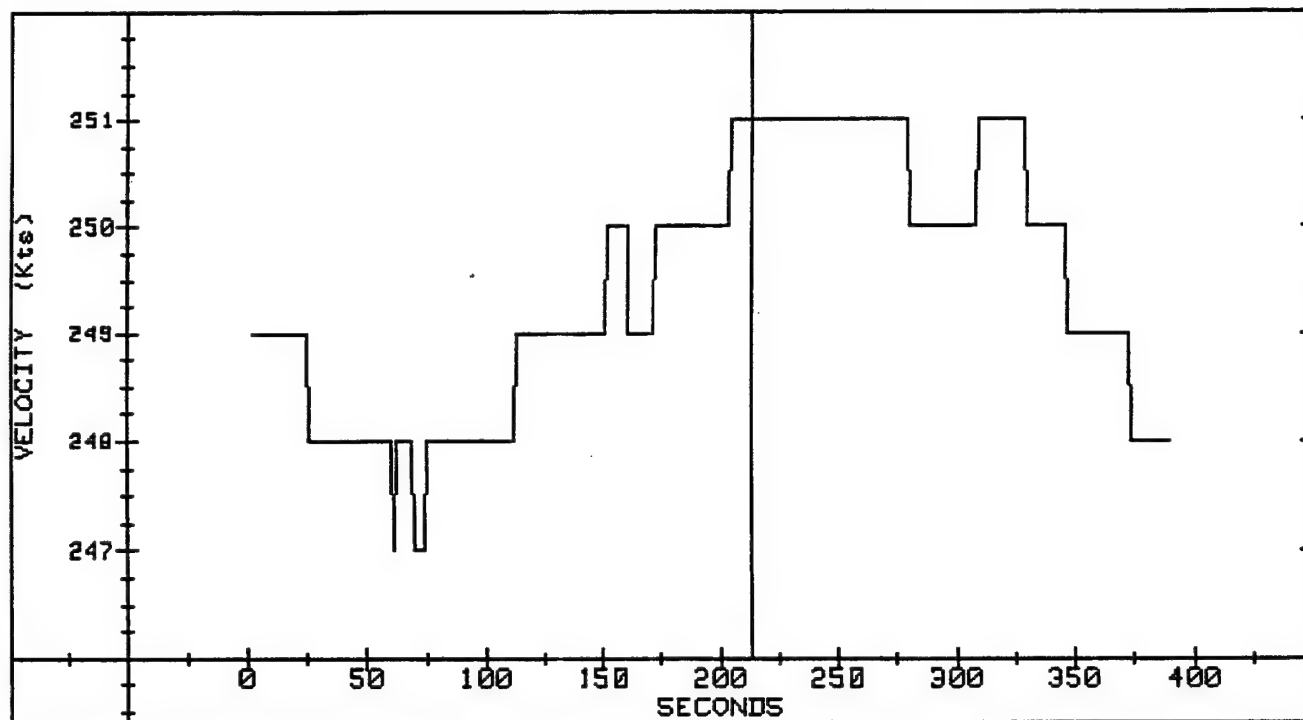
BARO ALTITUDE

DAY 17B TIME 2:7 PASS 25 m= 5854. sd= 4.28144



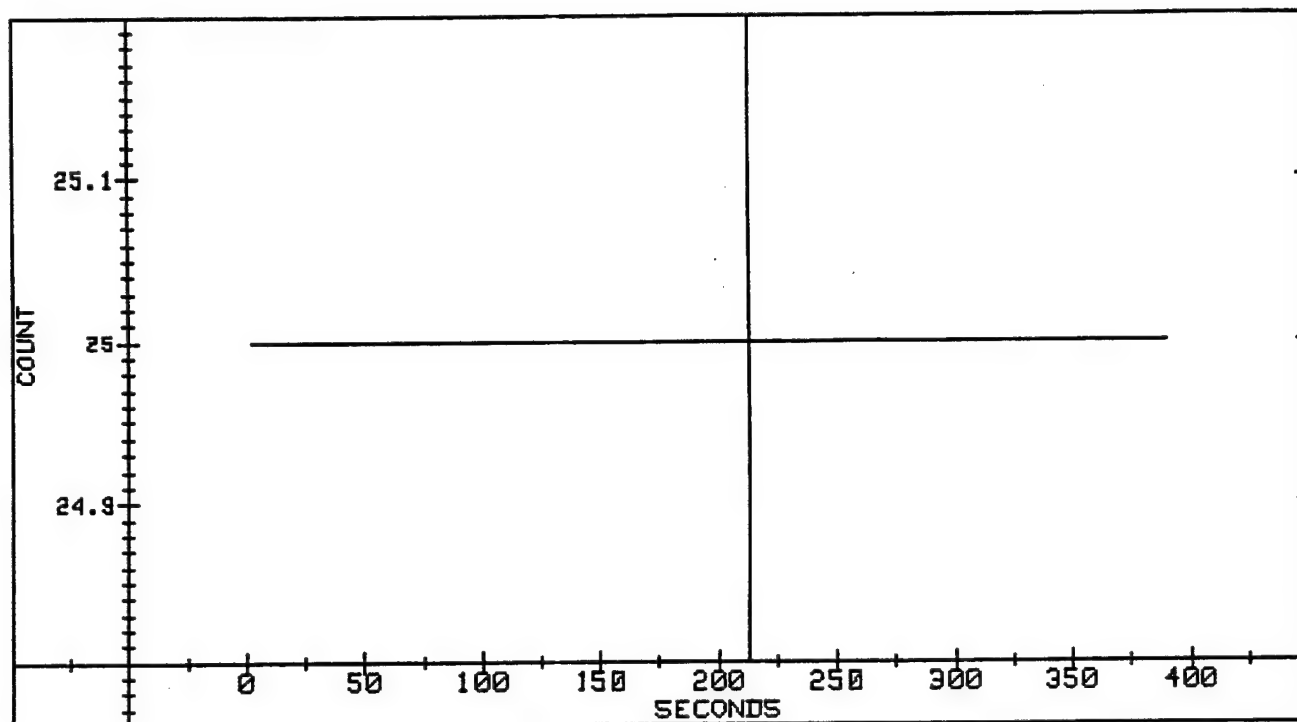
INS GROUND SPEED

DAY 170 TIME 2:7 PASS 25 m= 250.1, sd= 1.00994



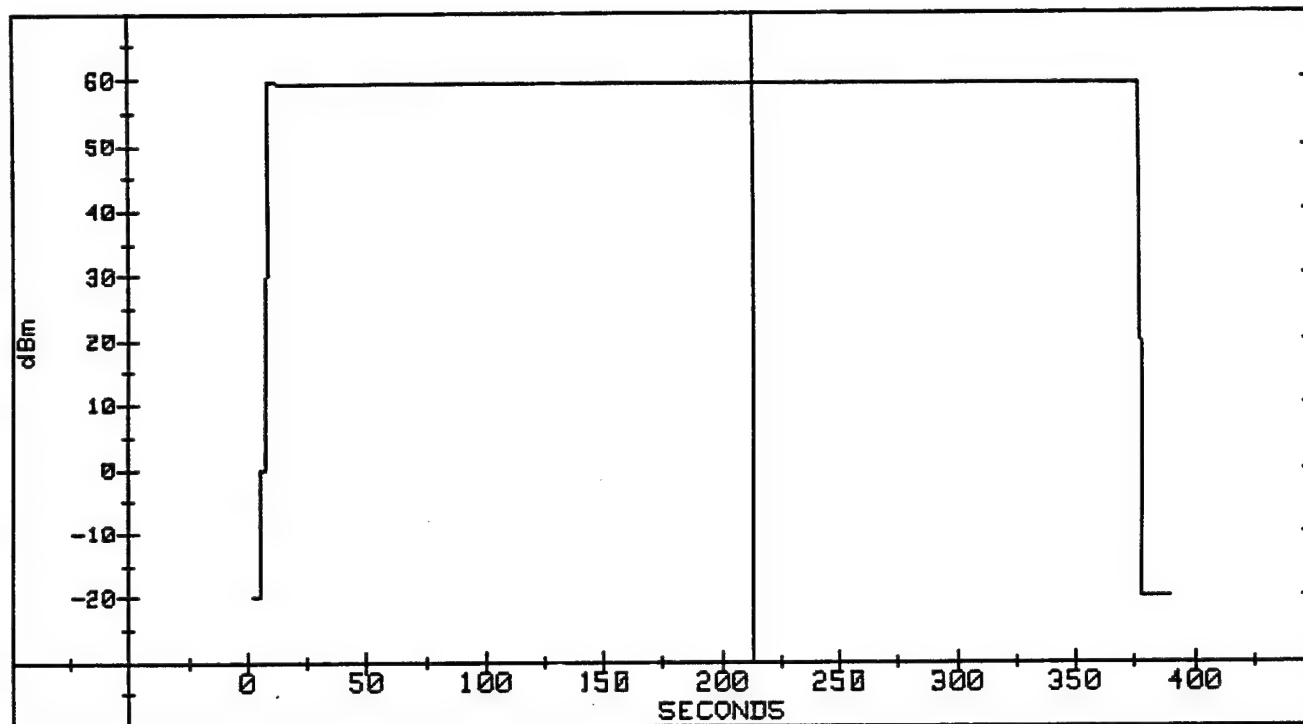
PASS NUMBER

DAY 178 TIME 2:7 PASS 25 m= 25, sd= 0



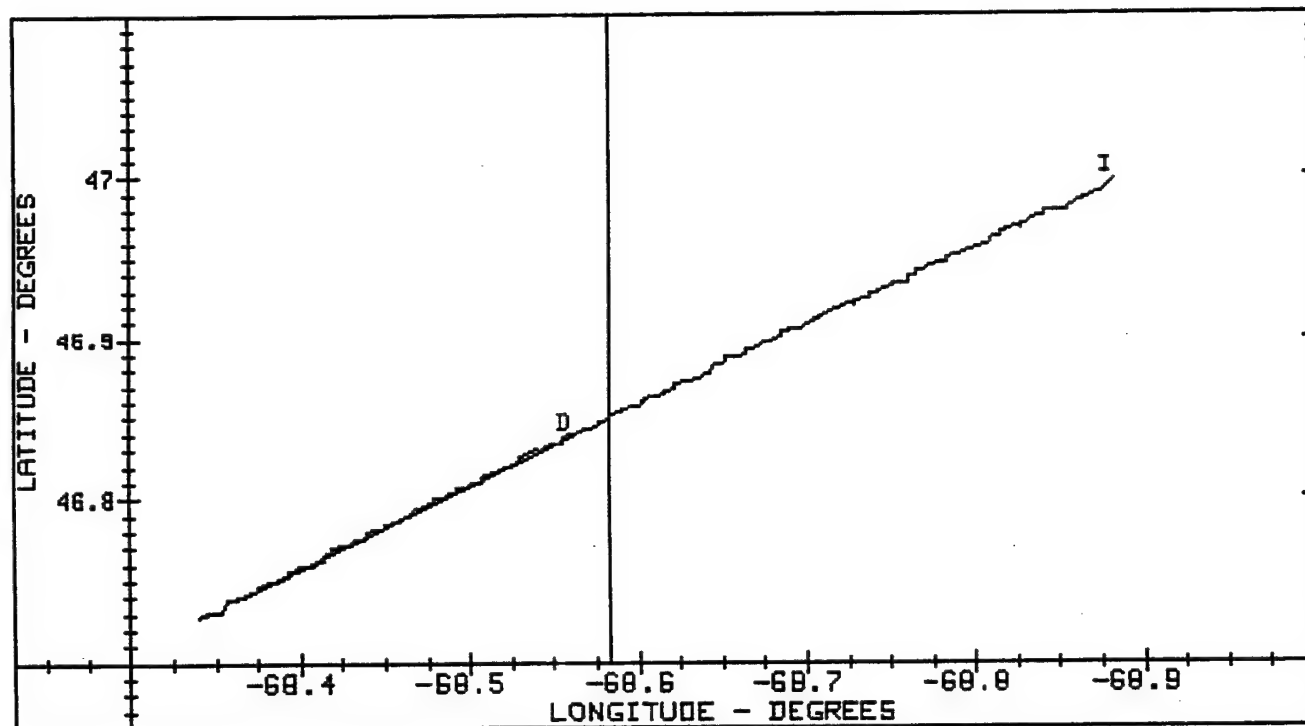
P Band Power

DAY 178 TIME 2:7 PASS 25 m= 52.79, sd= 21.4292



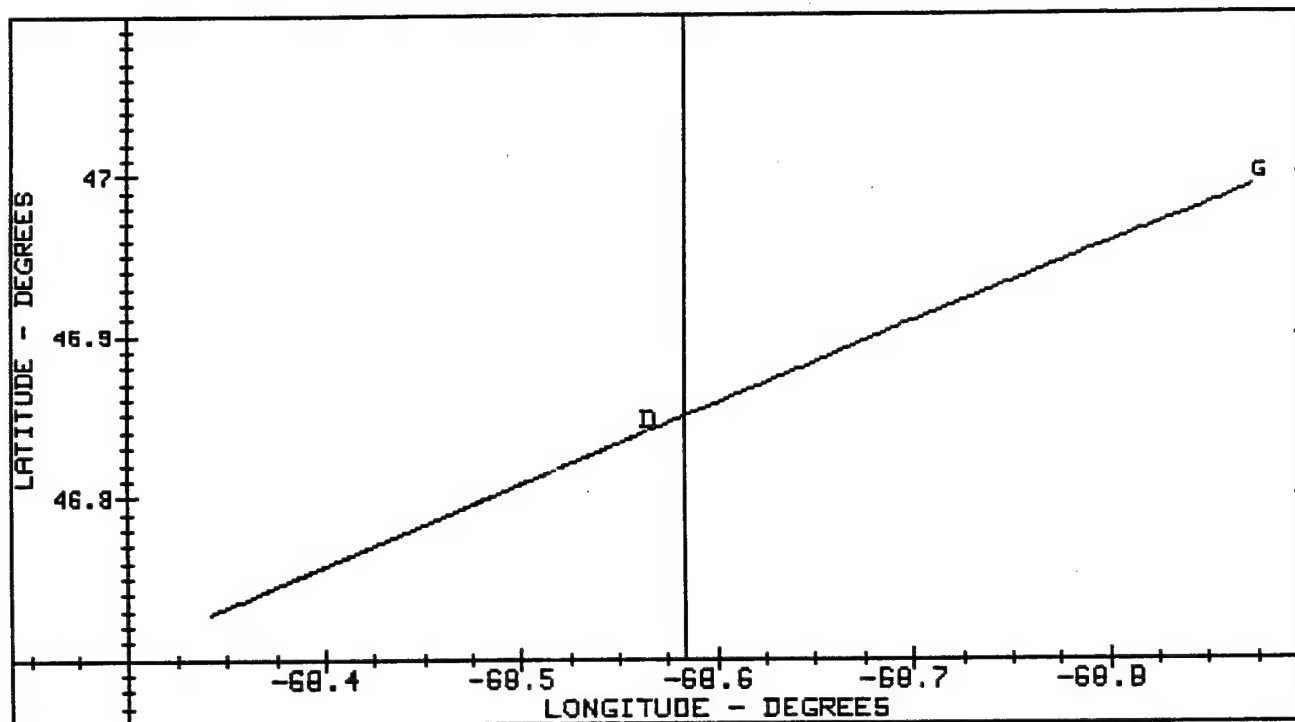
INS AIRCRAFT POSITION

DAY 178 TIME 2:7 PASS 25



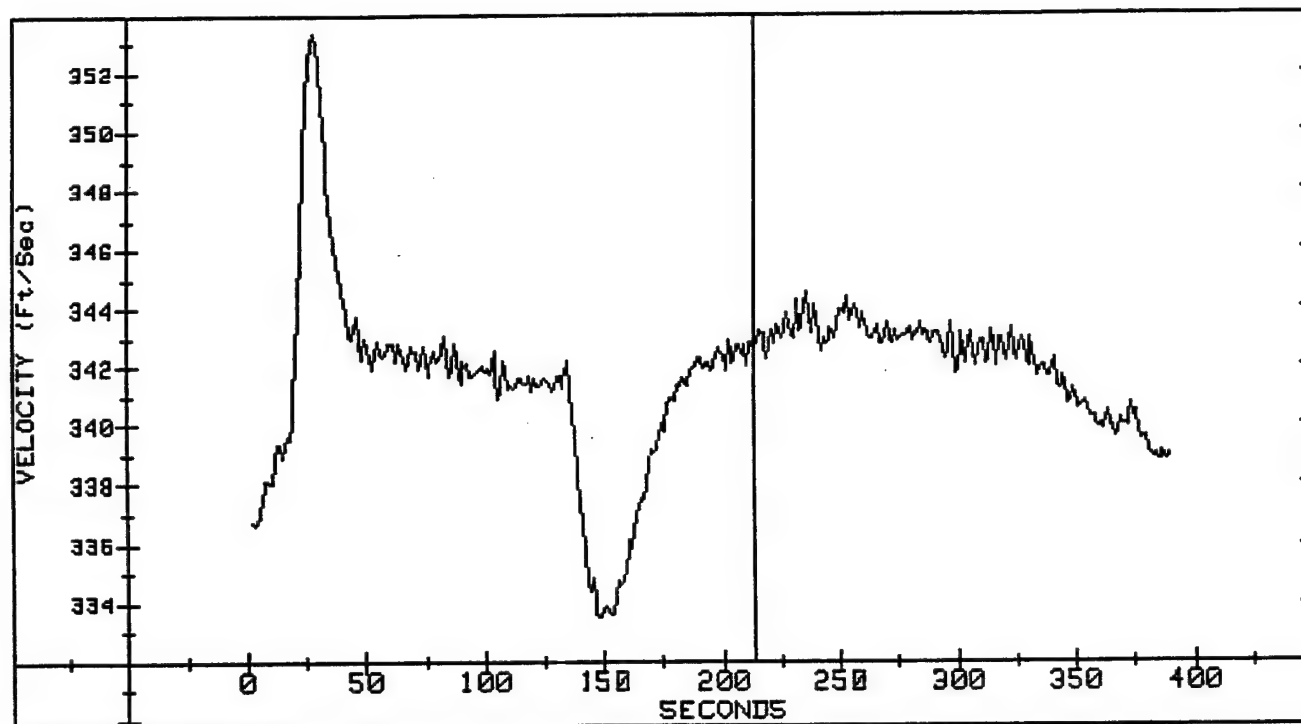
GPS AIRCRAFT POSITION

DAY 178 TIME 2:7 PASS 25



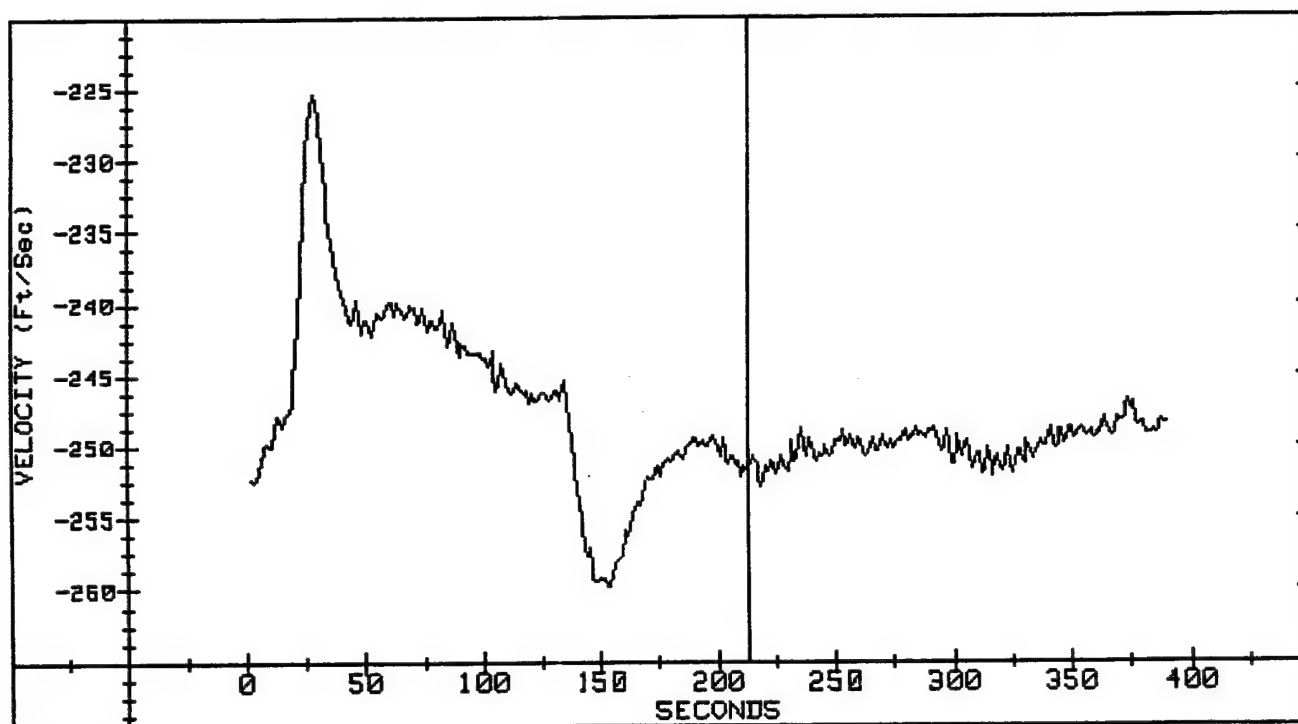
GPS V_e

DAY 170 TIME 2:7 PASS 25 m= 342.1, sd= 1.47299



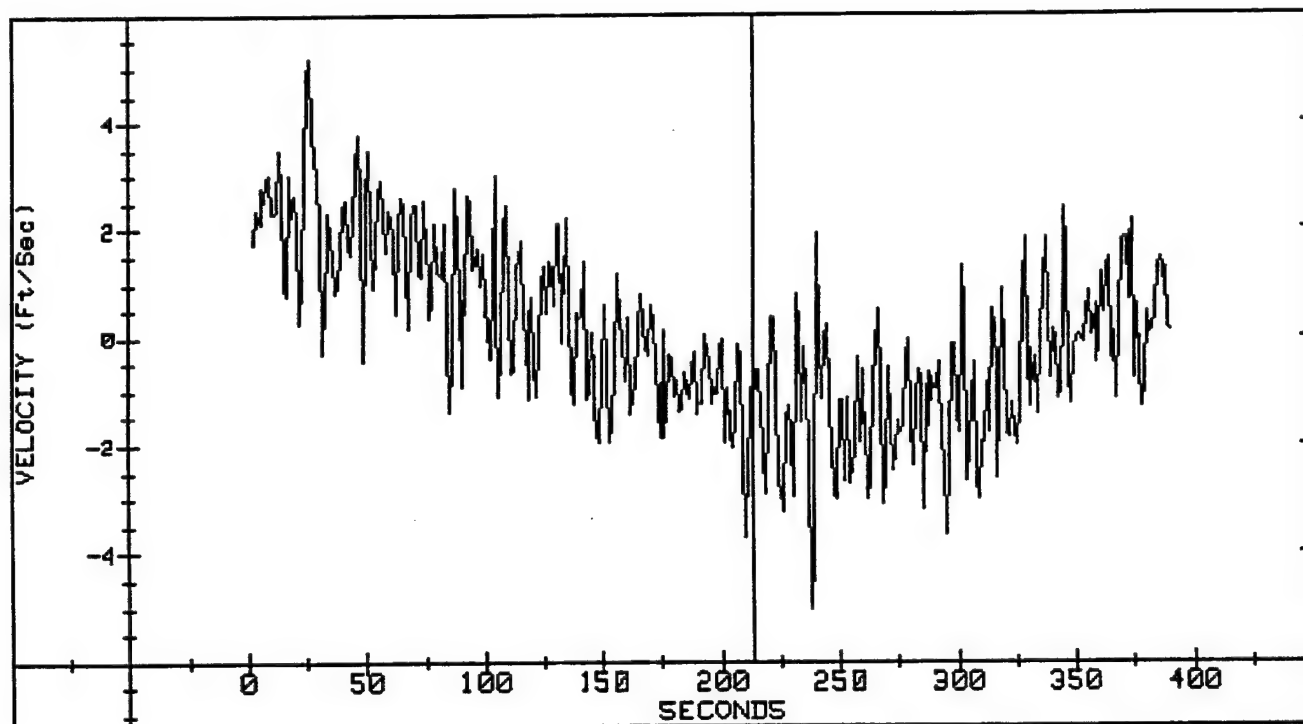
GPS Vn

DAY 170 TIME 2:7 PASS 25 m= -249.7, sd= 1.0132



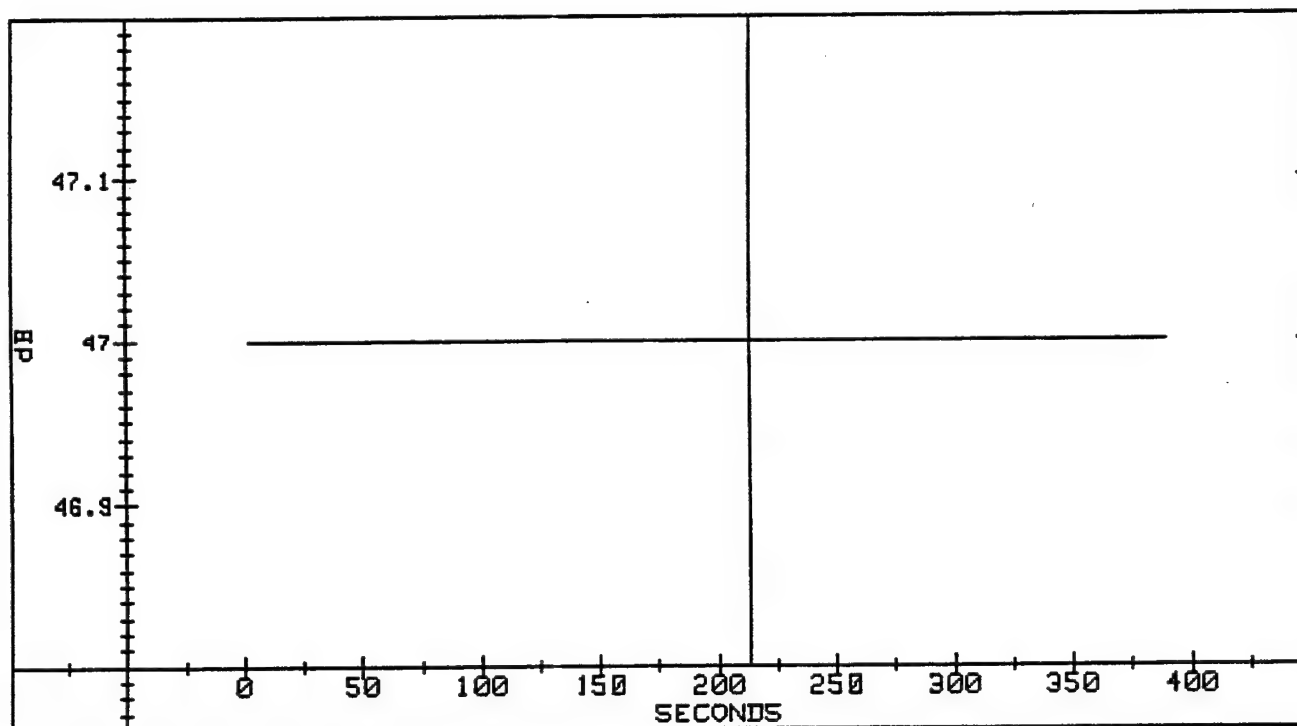
GPS Vv

DRY 178 TIME 2:7 PASS 25 m= -.7017, sd= 1.37436



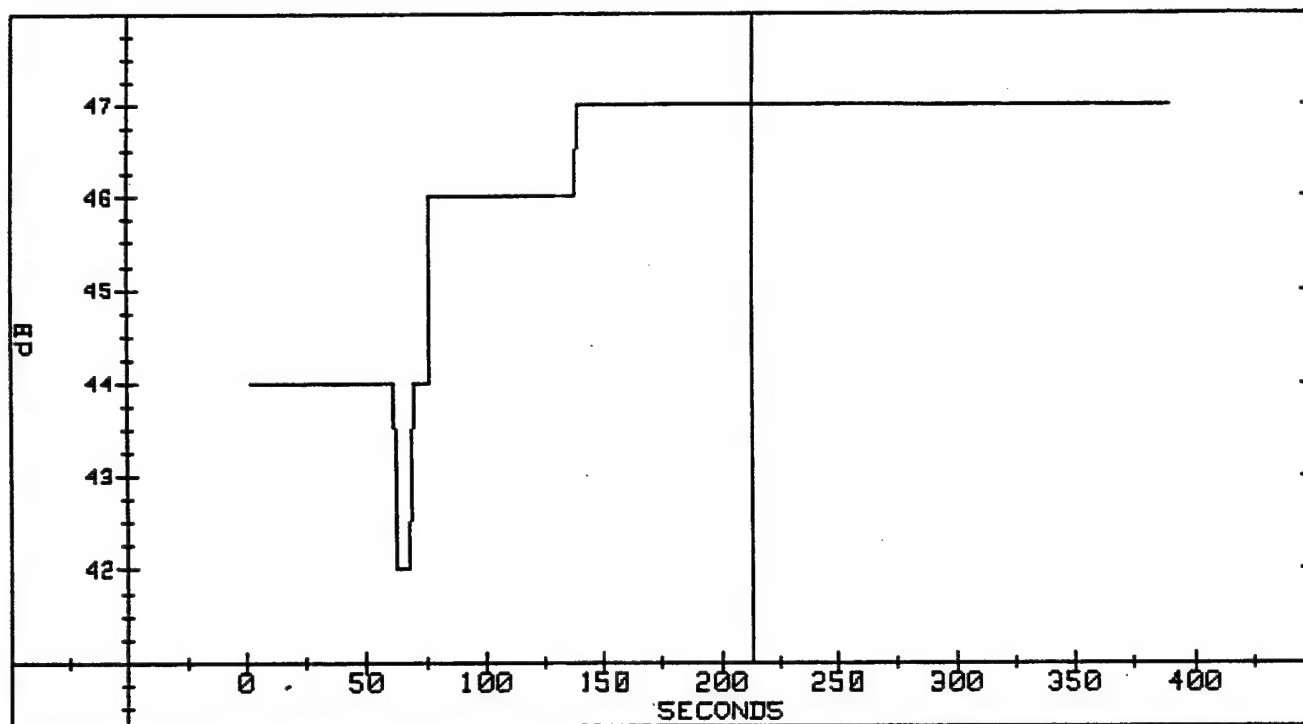
Ch1 RES Attenuation

DAY 178 TIME 2:7 PASS 25 m= 47, sd= 0



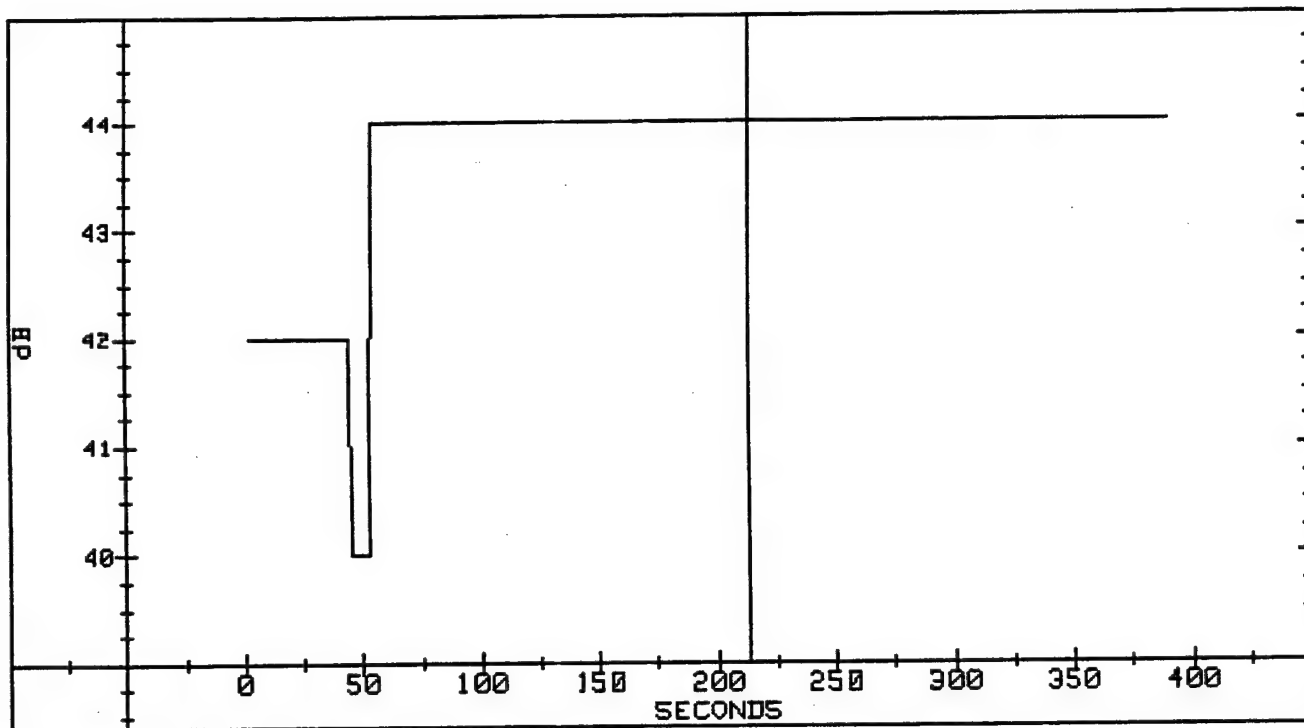
Ch2 RES Attenuation

DAY 178 TIME 2:7 PASS 25 m= 47, sd= 0



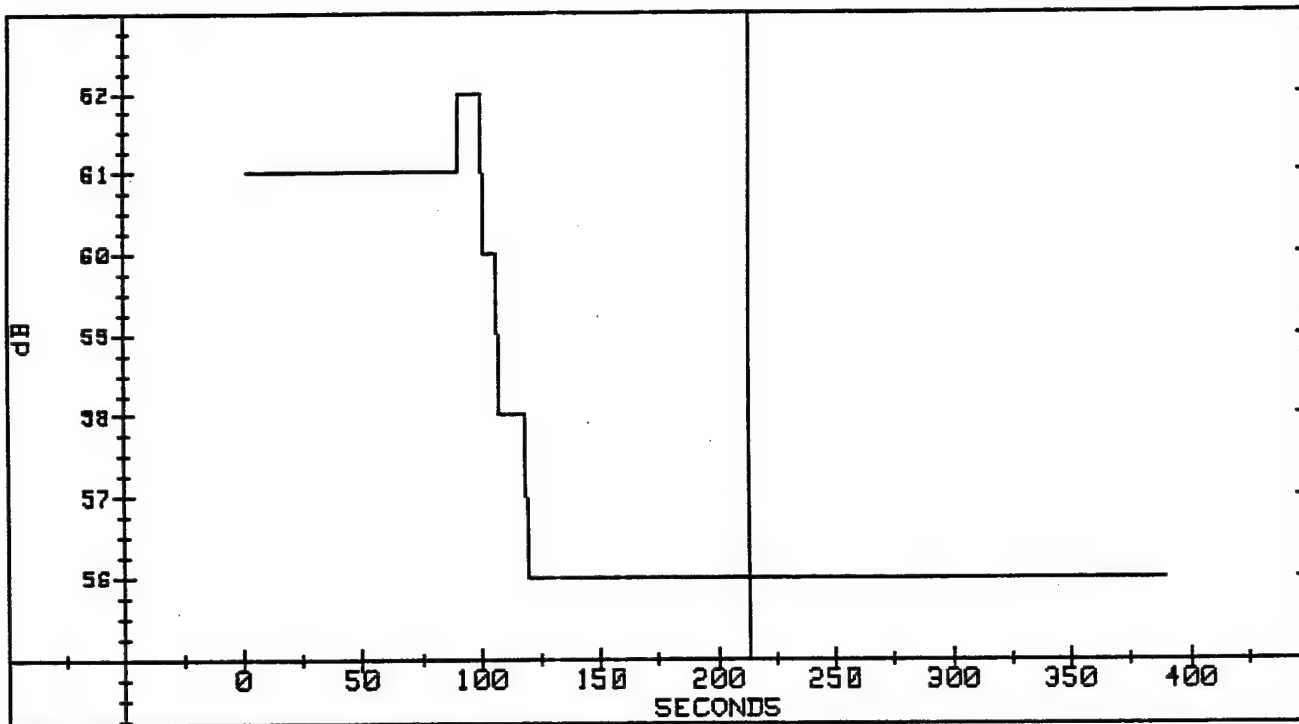
Ch3 RES Attenuation

DAY 178 TIME 2:7 PASS 25 m= 44, sd= 0



Ch4 RES Attenuation

DAY 178 TIME 2:7 PASS 25 m= 56, sd= 0

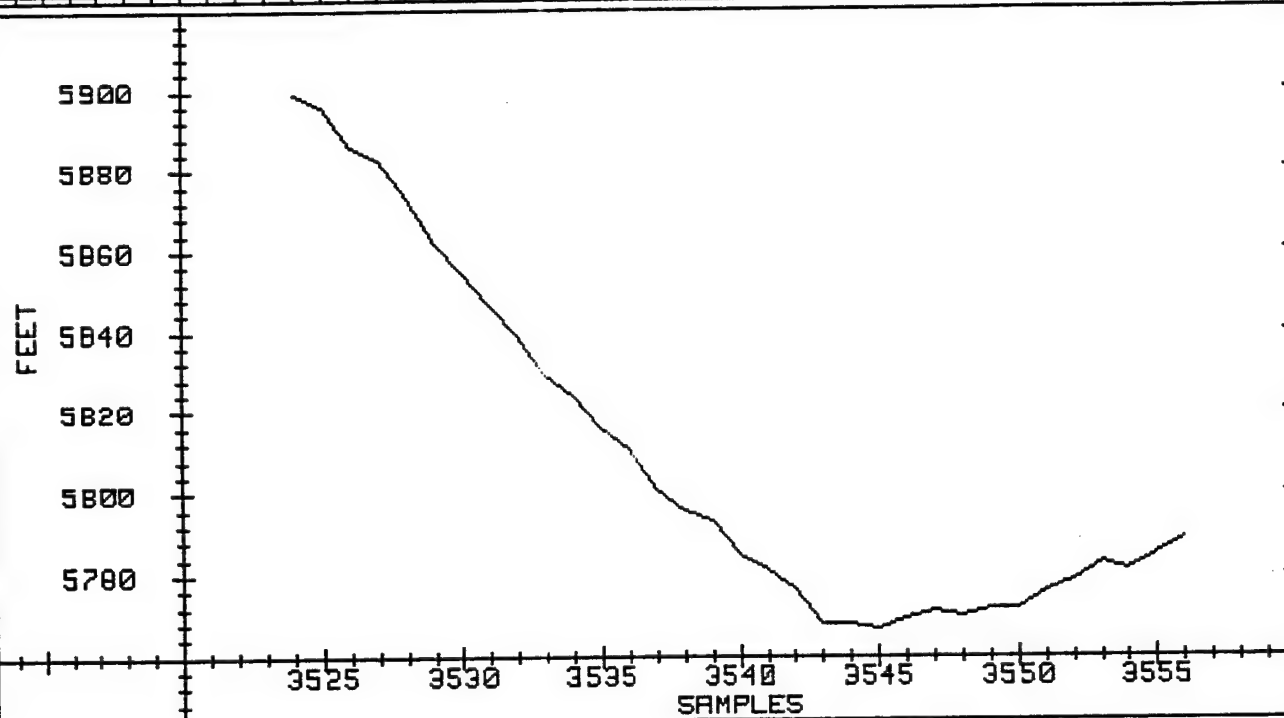


GPS ALTITUDE

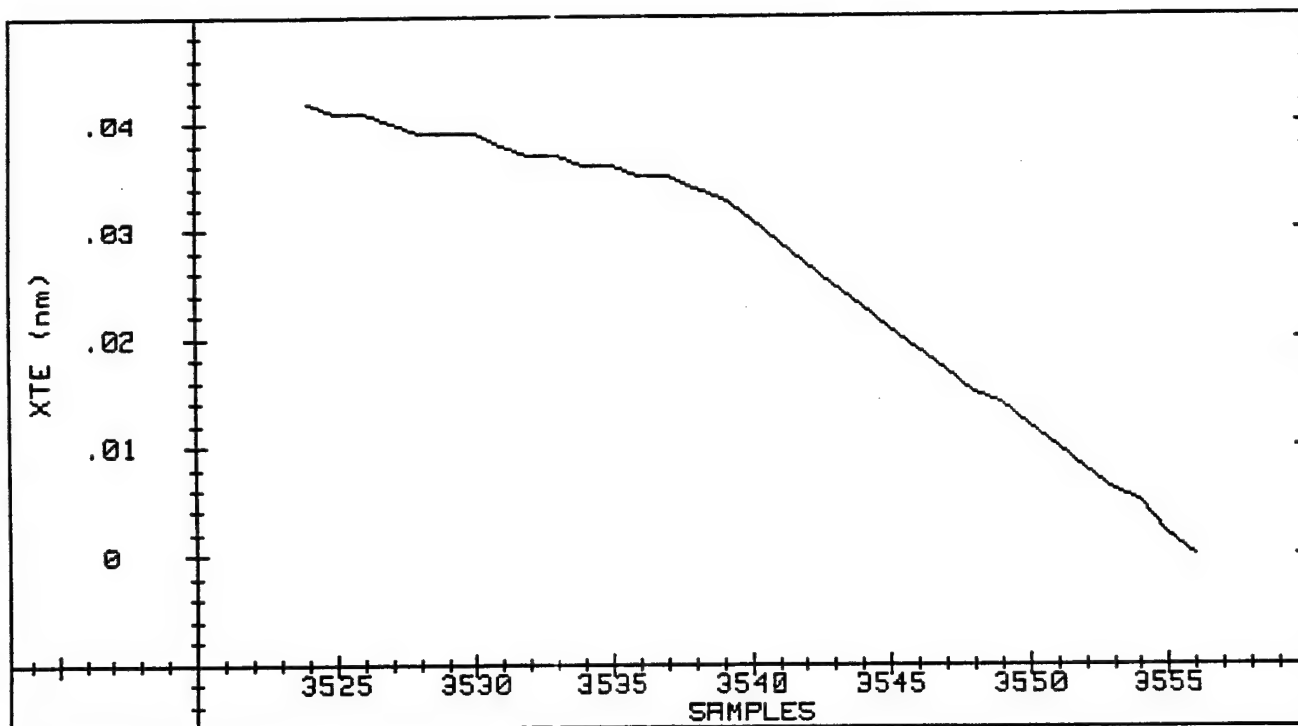
MEAN= 5809.18 STANDARD DEVIATION= 42.227

DATE: June 26, 1995 PASS 25

OFF
ON
BAR



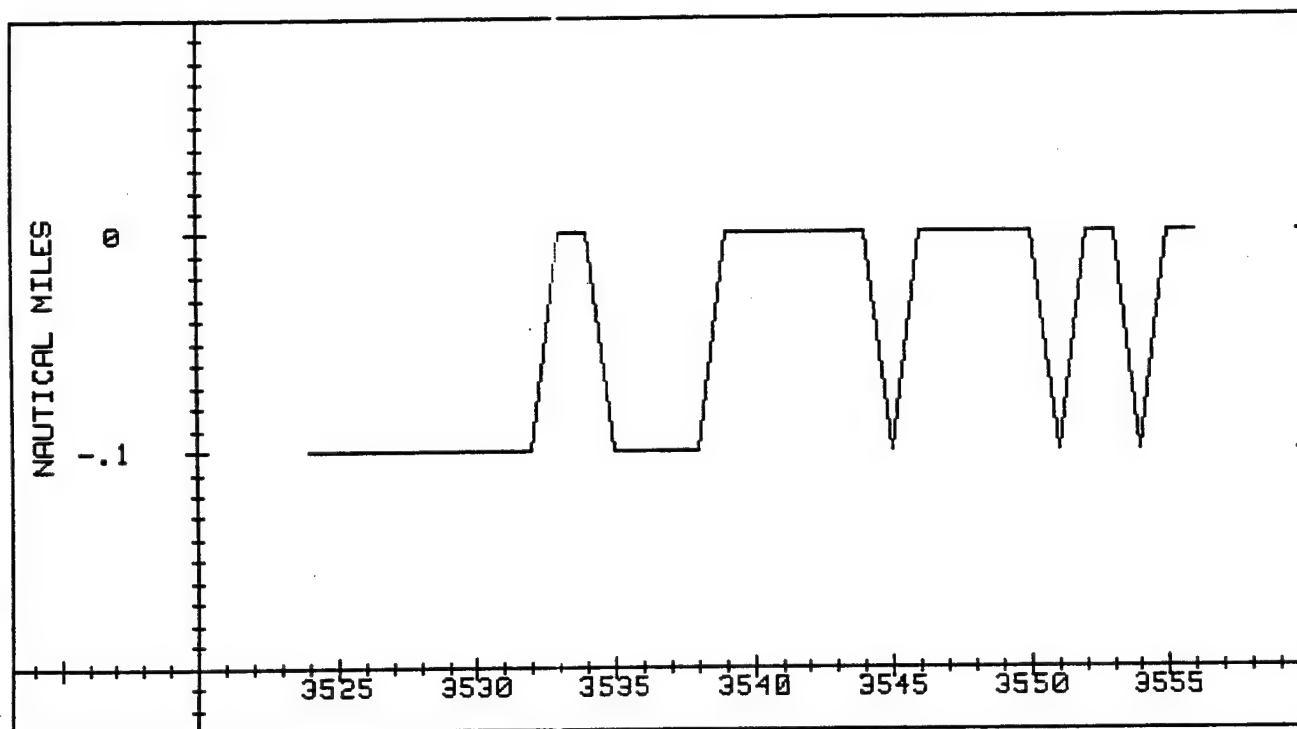
GPS Cross Track Error
MEAN= .0262424 STANDARD DEVIATION= .0130292
DATE: June 26, 1995 PASS 25



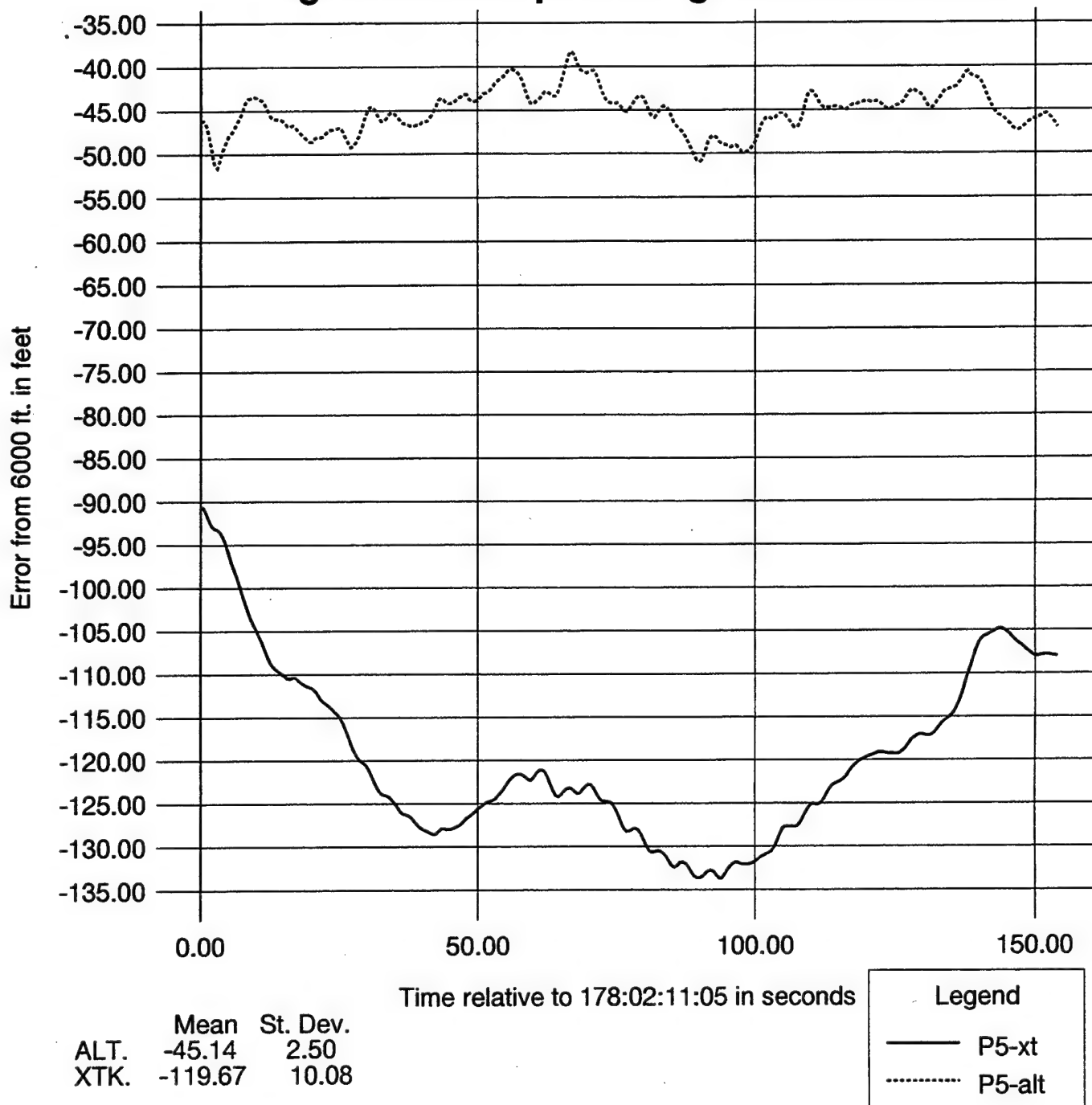
INS CROSS TRACK ERROR

MEAN= -.0484848 STANDARD DEVIATION= .049977

DATE: June 26, 1995 PASS 25



Portage, ME - June 26, 1995 - Pass 25 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



27 Jun 1995
Tape: E1414

Post-line Data Sheet
Line 47
Mission: PORTAGE MAINE, DAY

Time: 178:02:22:33
Pass 26
Req.# 25

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	6000 ft	Wave/Pol.:	p-VV	p-VH	p-HV	p-HH
Baro:	5845 ft s.d.=	3 Swath Ctr Ang:	15.0°	15.0°	15.0°	15.0°
Slt. rng:	20084 ft	Tgt Dep Ang:	15.0°	15.0°	15.0°	15.0°
Look:	Right	St rng (ft):	18544	18544	18544	18544
Depr Ang:	25.0°	Near Rng Dep:	18.4°	18.4°	18.4°	18.4°
Des. trk:	276.0°	Far Rng Dep:	9.7°	9.7°	9.7°	9.7°
Start Sq:	90.0°	Atten (dB):	47.0	45.0	44.0	56.0
End Sq:	90.0°	RMS Video (%FS)	24.5	32.2	20.5	17.0

WAYPOINTS

	Latitude	Longitude
Line up:	N 46:39.29	W 68:04.91
Start:	N 46:40.59	W 68:22.23
End:	N 46:41.63	W 68:36.69
From:	N 42:35.05	W 45:46.38
To:	N 45:52.31	W 92:35.10

Main Target: CALCS

Mocomp Point:

Lat: N 46:44.29

Long: W 68:28.98

Tgt Trk: 0.0 Tgt Vel: 0.0

Alt: 802.0 ft

RADAR PARAMETERS - for UWB

RTP Channel: 1
Resolution: N/A
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6
TX Chirp Filename: CTL1U2B

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts) -
Ave Gndspd: Real -> 253.8 kts
Mocomp Off for Chnl 1, 2, 3, 4
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF
RX Chirp Filename: CRL1N0A

Ave Ref Vel -> -.4 fps (s.d.= 5.6)
Ave Fil Vel -> -2.2 fps (s.d.= 5.4)

NML XMIT PWR
X: -70.0
L: -70.0
C: -70.0
P: 46.4

ANT BIAS
Elevation: 0.0°
Azimuth: 0.0°
Pitch: 0.0°

Tape Footage	Drive no.
Starting: 201 ft	(2)
Ending: 1462 ft	(2)

Vel Bias	CAL Atten
X: 1035.0	X: 63.8 dB
Y: -433.0	L: 63.8 dB
Z: 6697.0	C: 63.8 dB

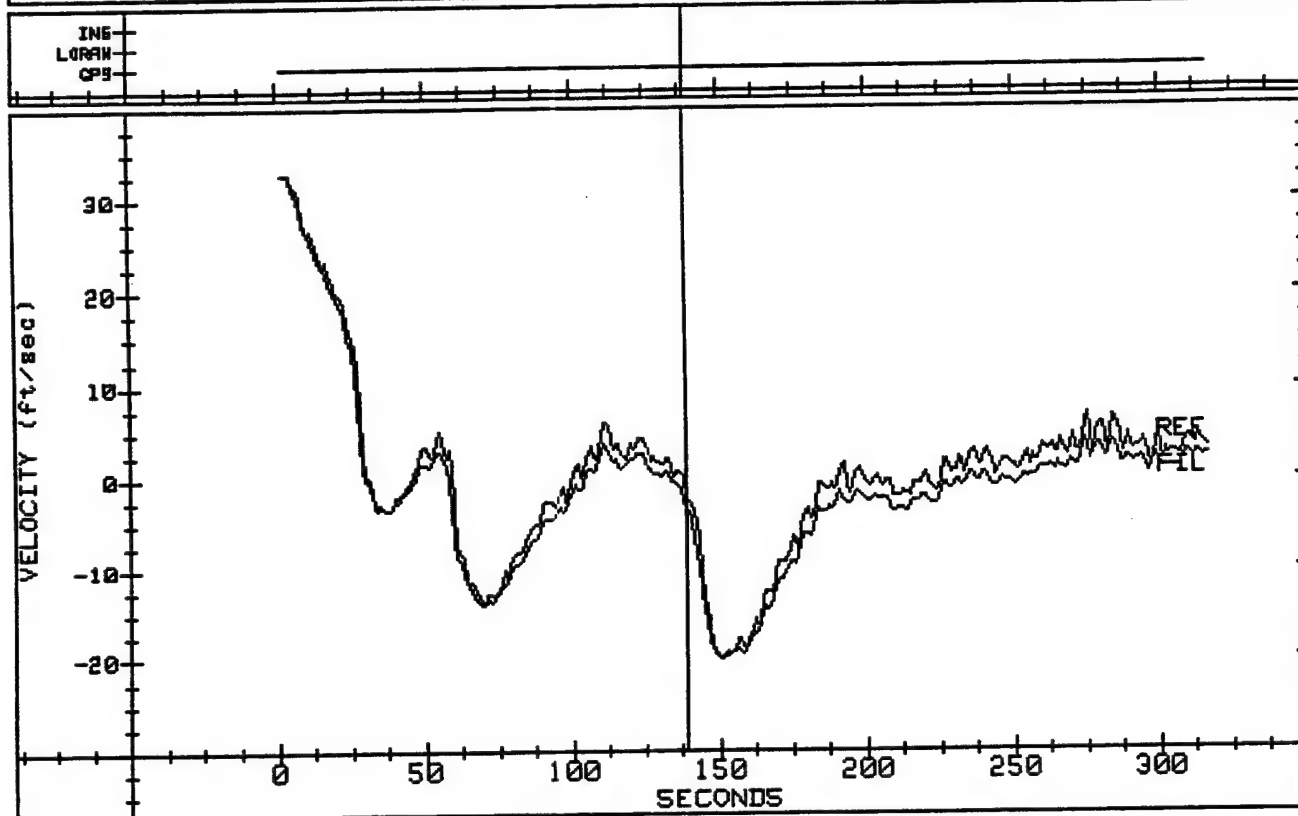
LINE Map Time (UCT)
Start: 02:22:33
End: 02:25:13

Mocomp Counters

Start: 1495751 0016D2C7h
End: 1522549 00173B75h

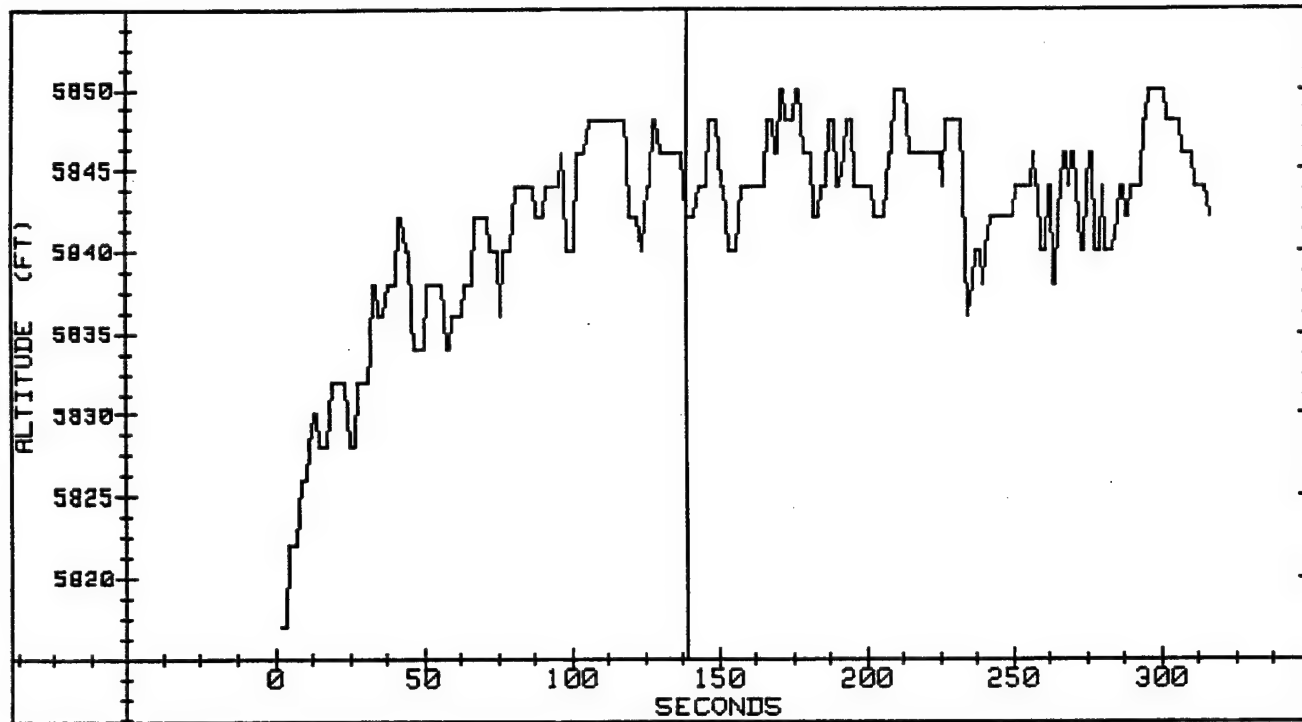
CPA (UCT): 00:00:00
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 178 TIME 2:19 PASS 26



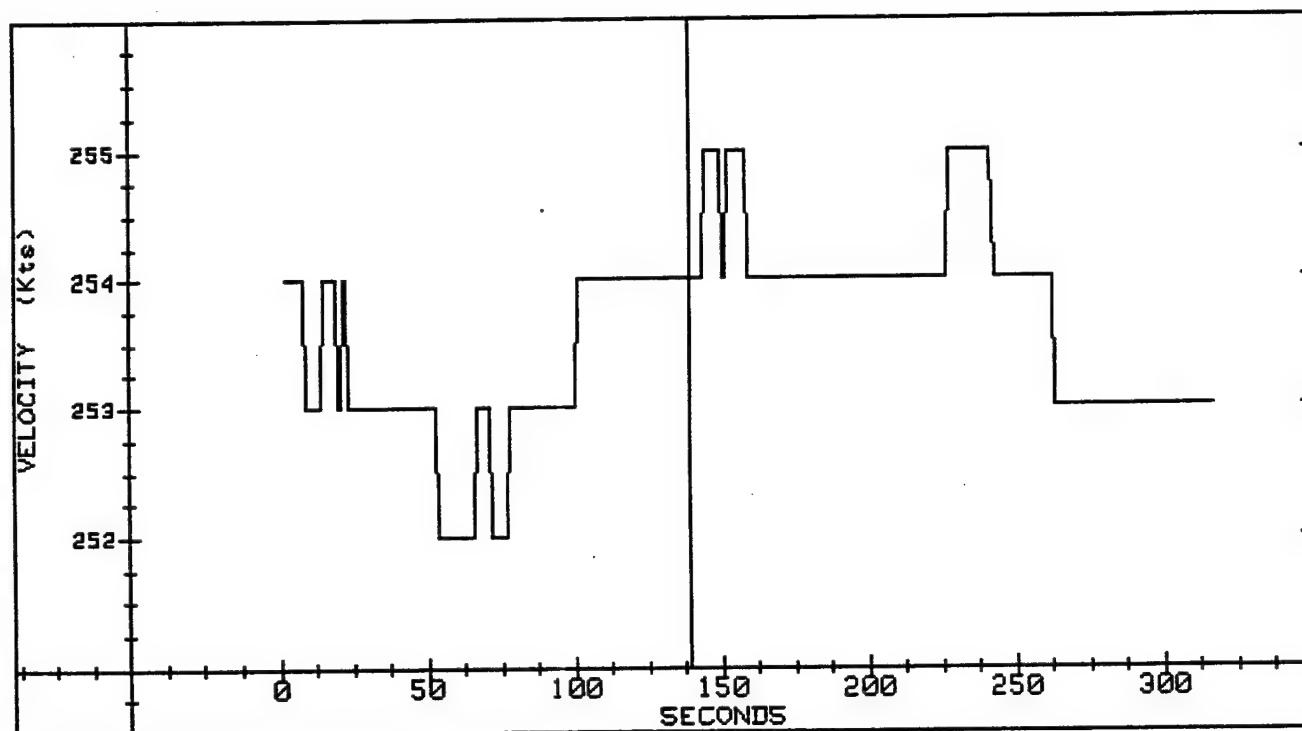
BARO ALTITUDE

DAY 178 TIME 2:19 PASS 26 m= 5845, sd= 3.07217



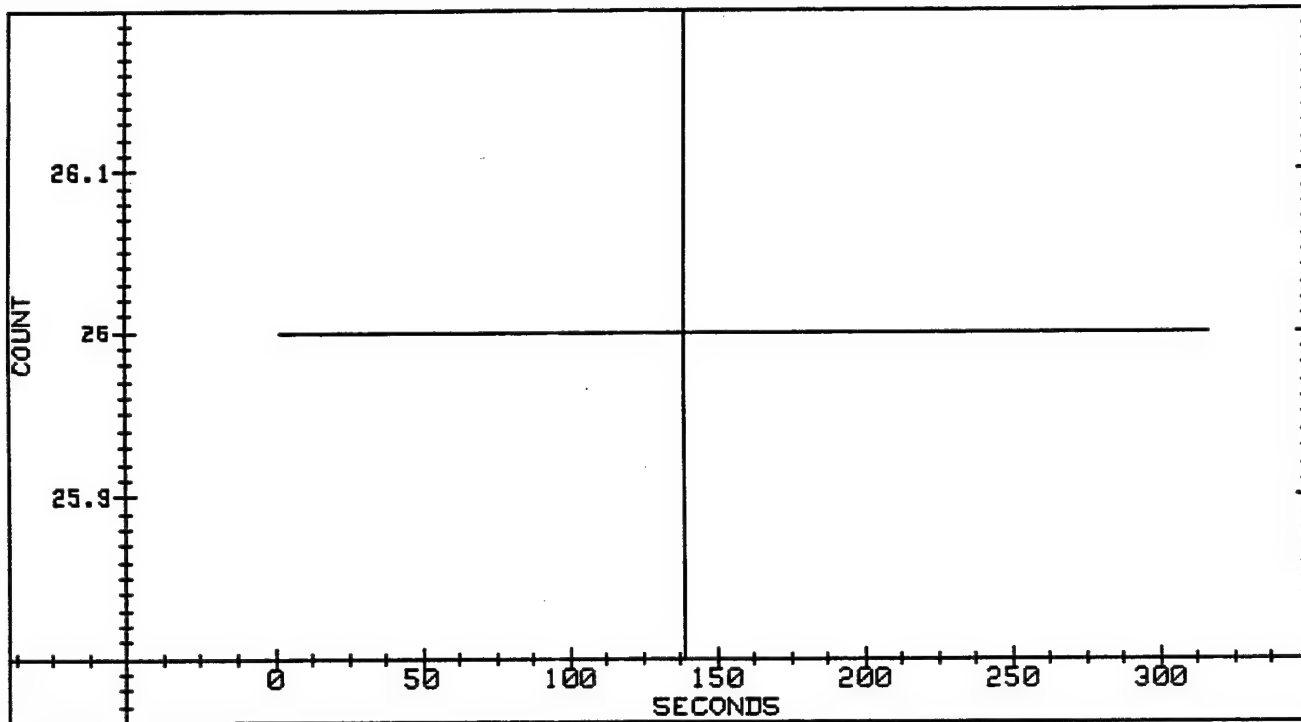
INS GROUND SPEED

DAY 178 TIME 2:19 PASS 26 m= 253.8, sd= .630244



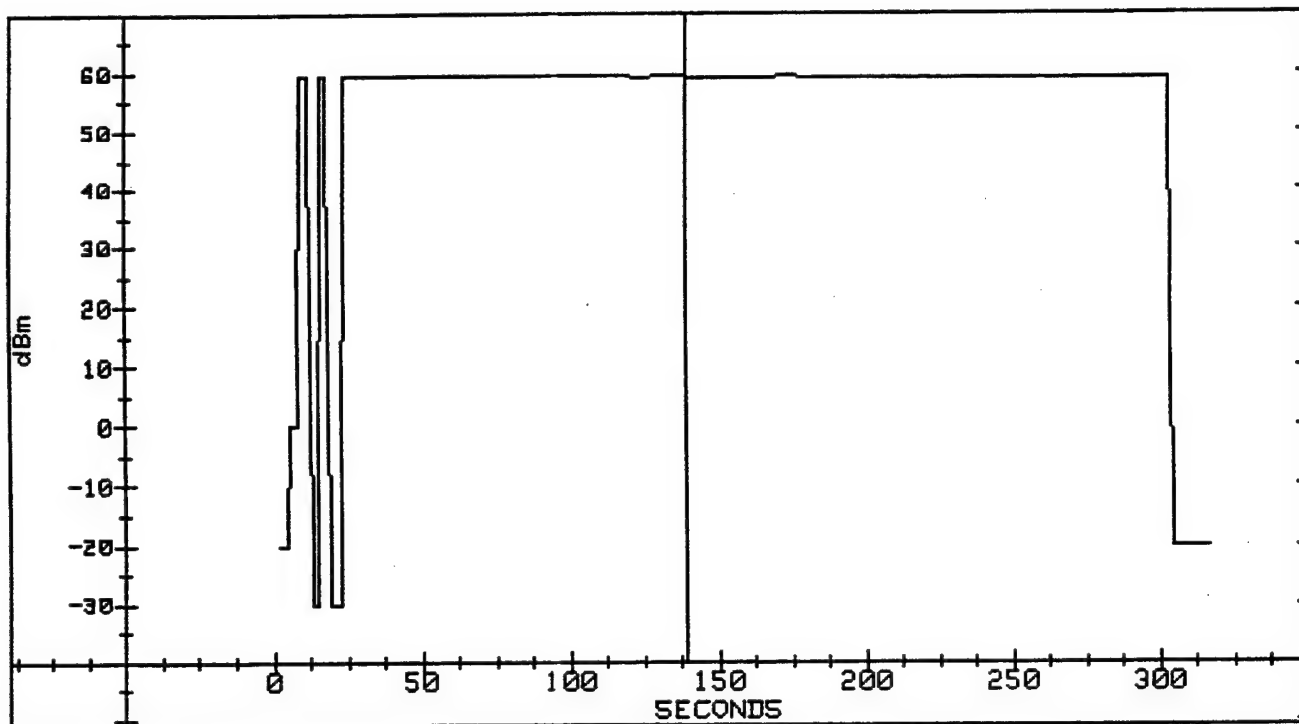
PASS NUMBER

DAY 178 TIME 2:19 PASS 26 m= 26. sd= 0



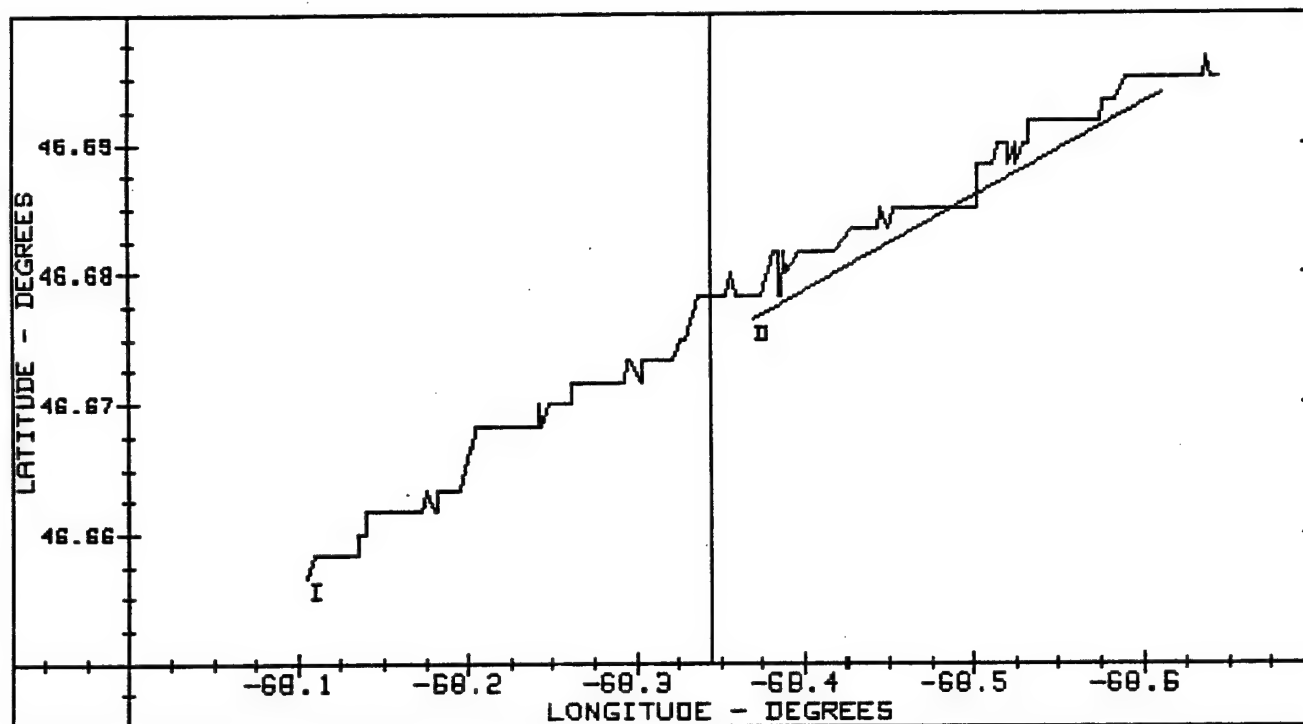
P Band Power

DAY 178 TIME 2:19 PASS 26 m= 52.81, sd= 21.5700



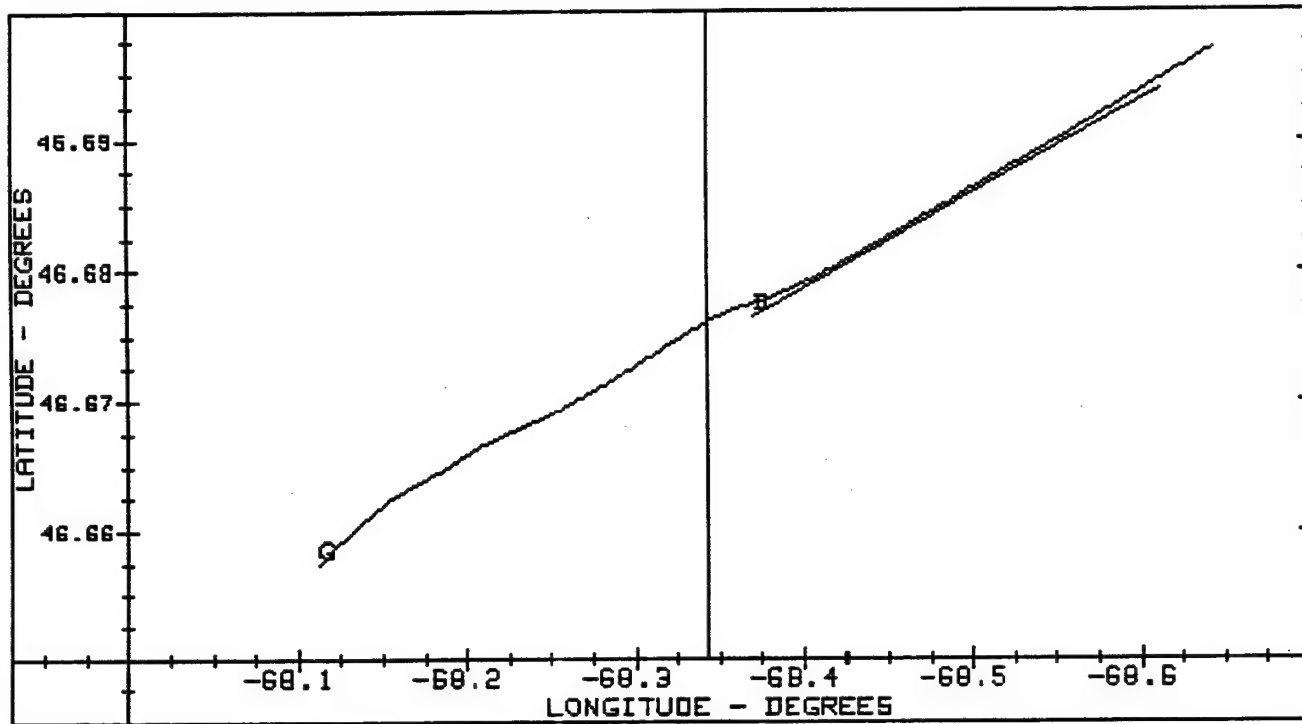
INS AIRCRAFT POSITION

DAY 170 TIME 2:19 PASS 26



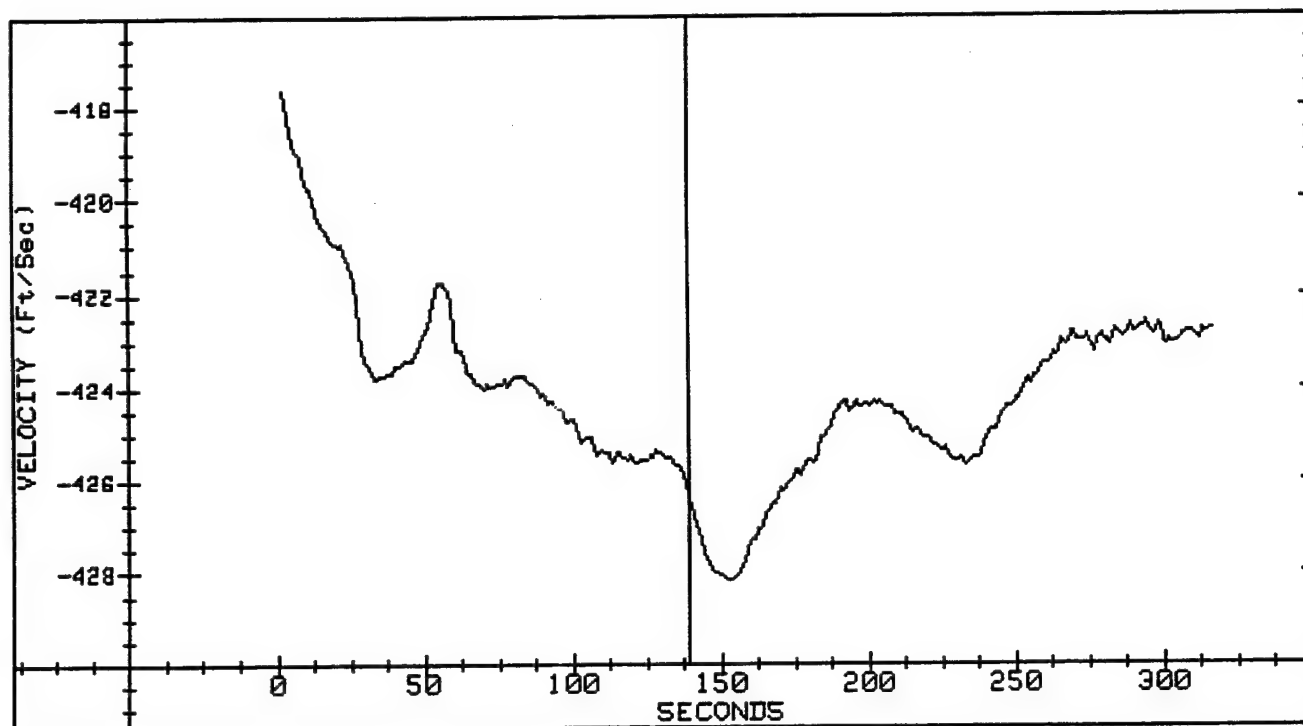
GPS AIRCRAFT POSITION

DAY 178 TIME 2:19 PASS 26



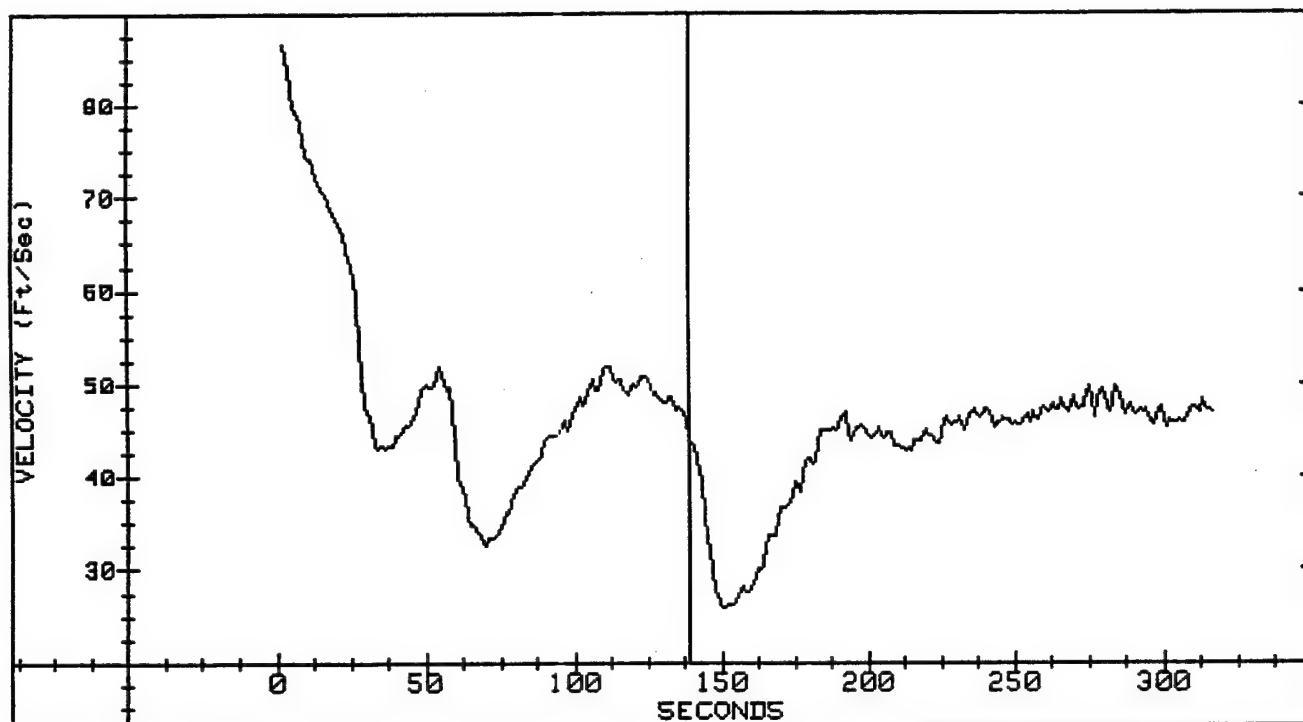
GPS V_E

DAY 170 TIME 2:19 PASS 26 m= -424.4, sd= 1.33831



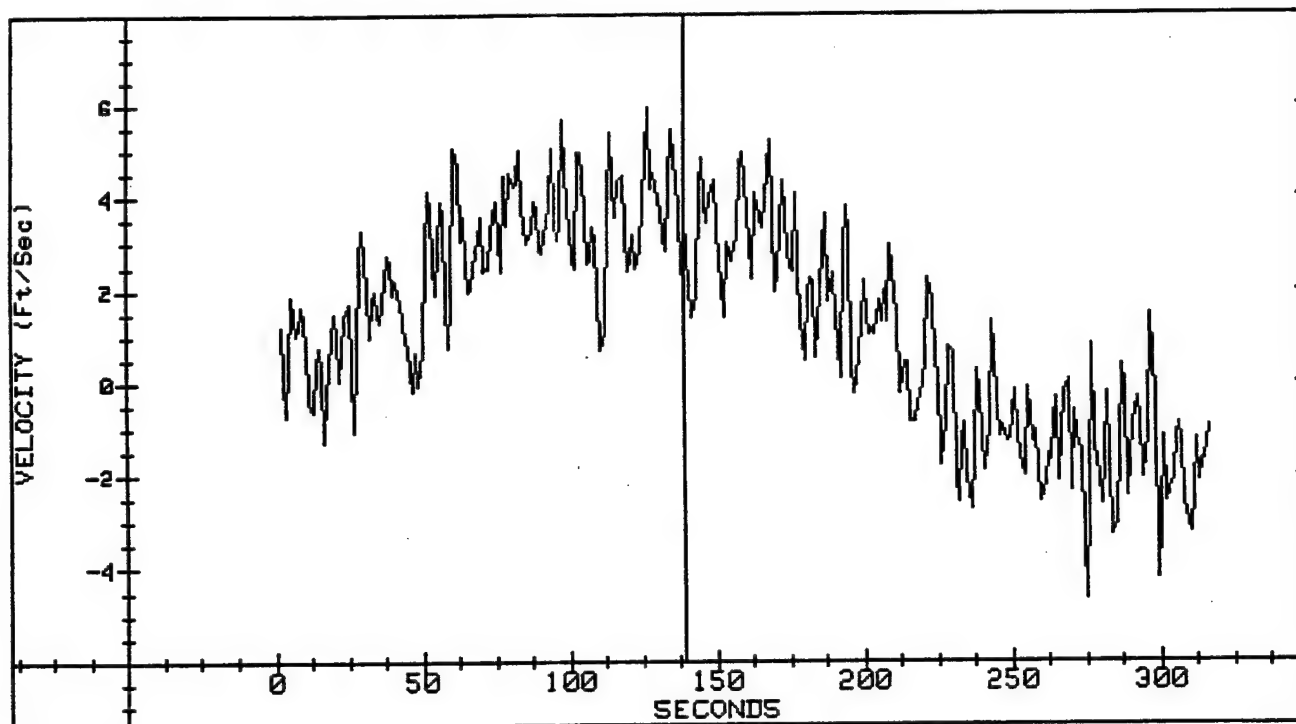
GPS Vn

DAY 178 TIME 2:19 PRSS 26 m= 44.21, sd= 4.08063



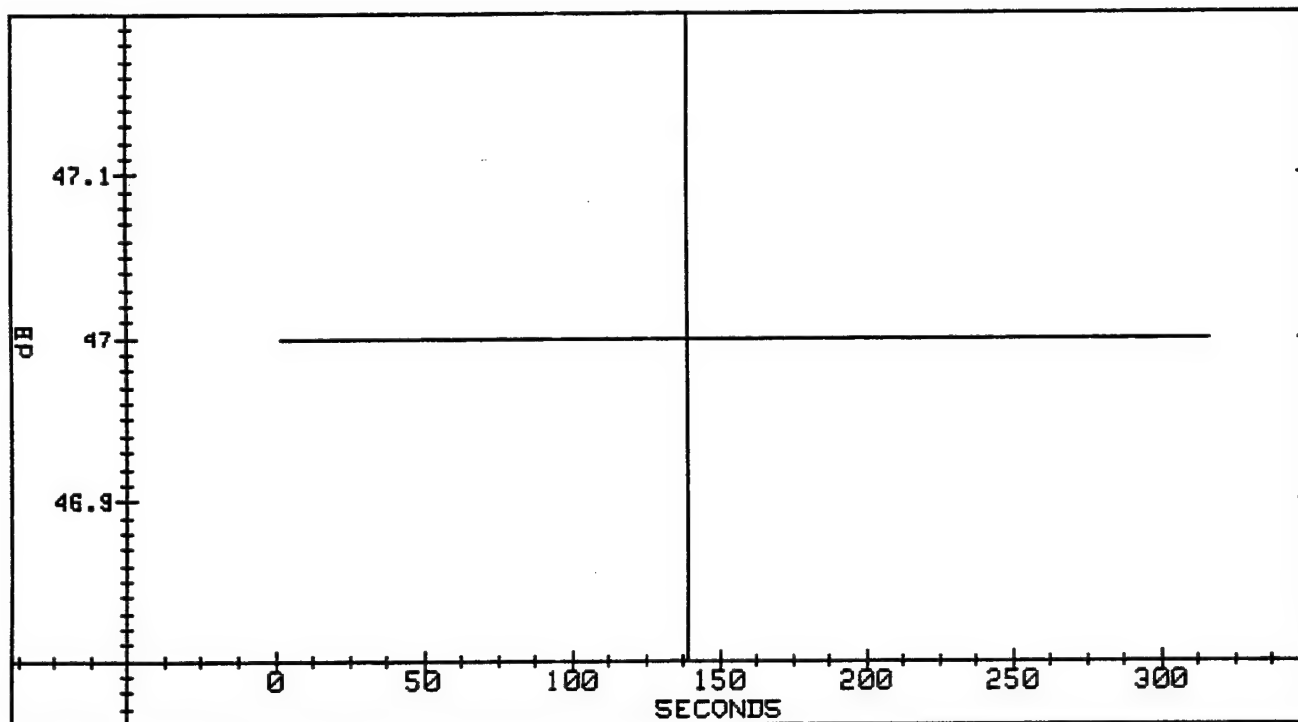
GPS Vv

DAY 178 TIME 2:19 PASS 26 m= .00734, sd= 2.10294



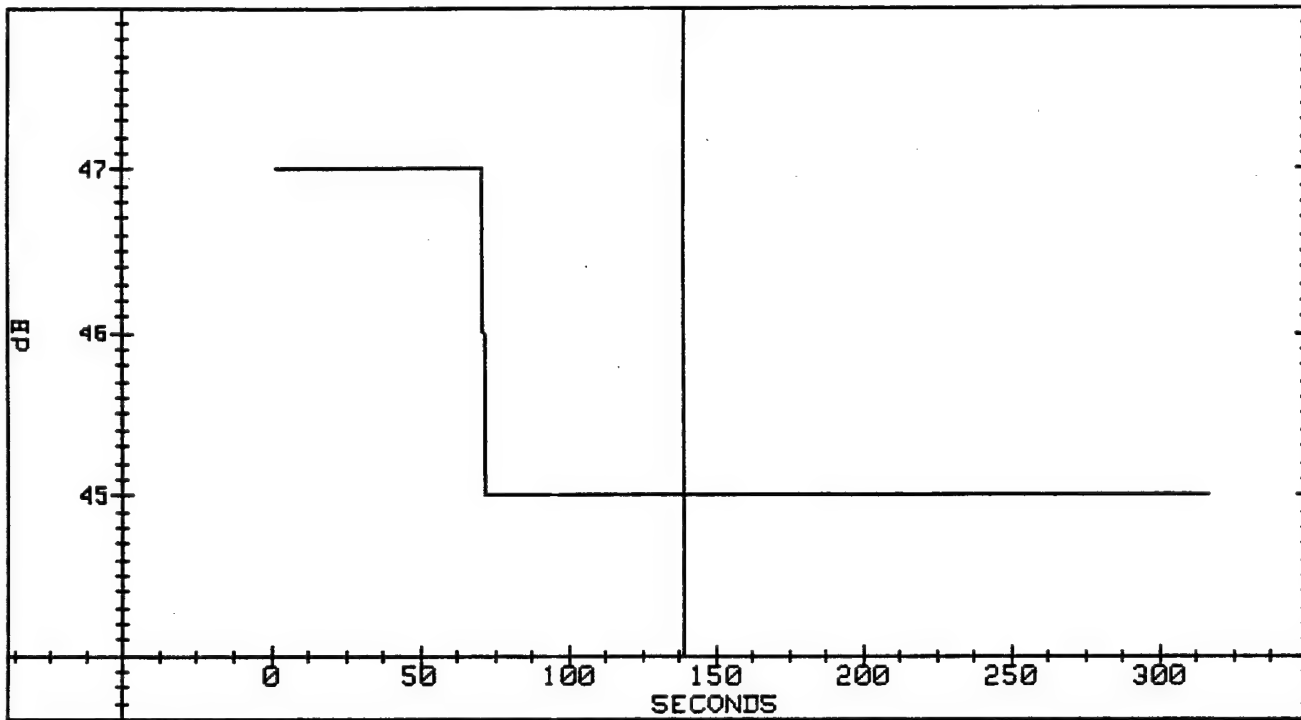
Ch1 RES Attenuation

DAY 178 TIME 2:19 PASS 26 m= 47. sd= 0



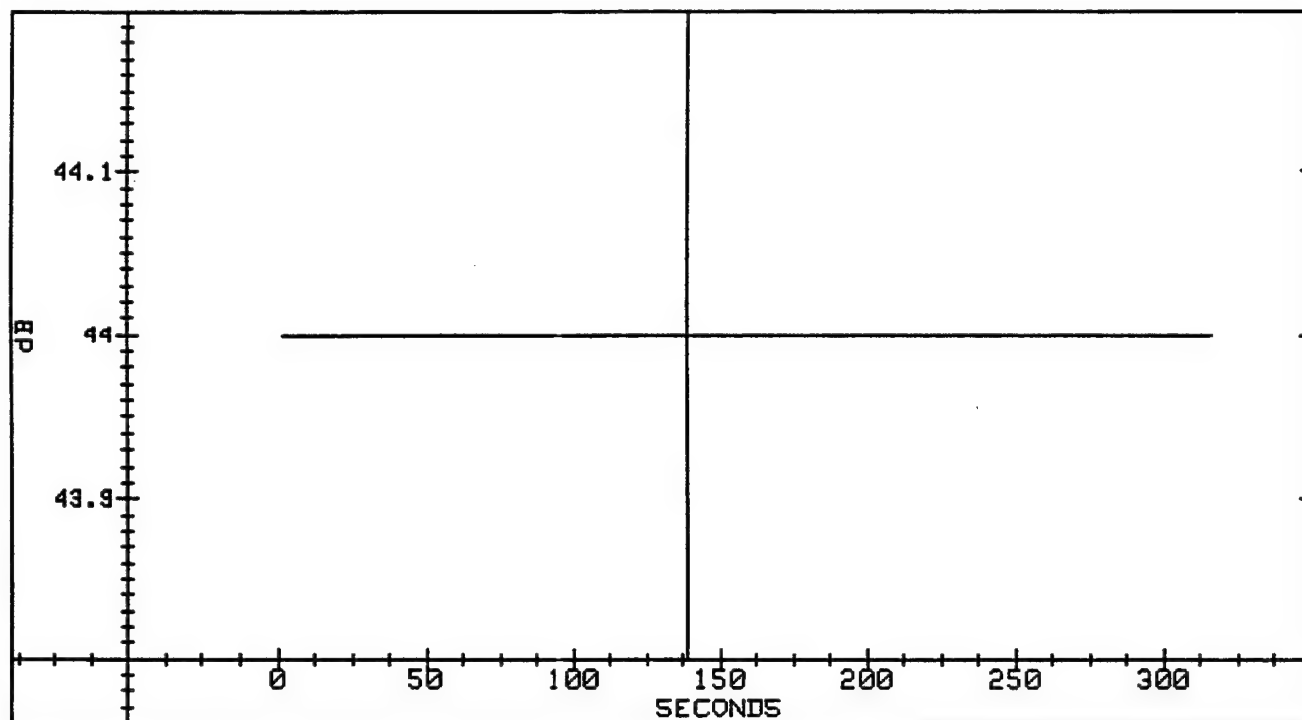
Ch2 RES Attenuation

DAY 170 TIME 2:19 PASS 26 m- 45, sd- 0



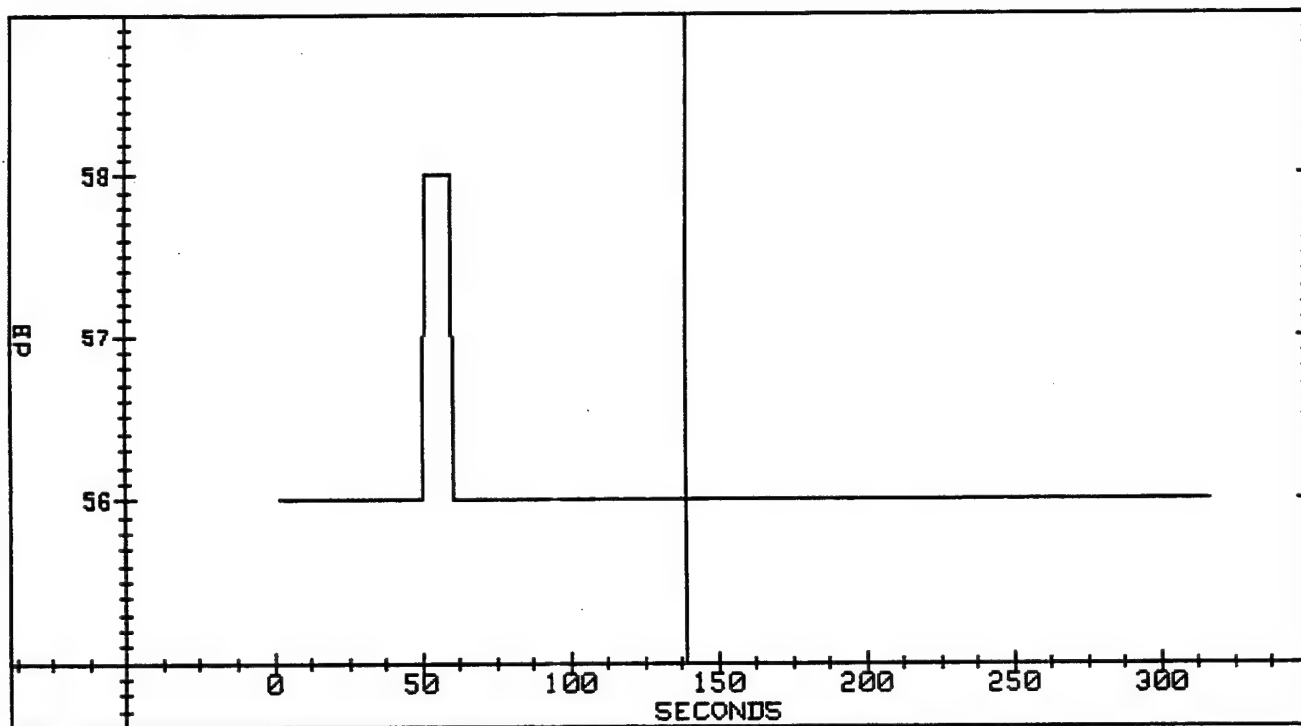
Ch3 RES Attenuation

DAY 170 TIME 2:19 PASS 26 m= 44, sd= 0



Ch4 RES Attenuation

DAY 178 TIME 2:19 PASS 26 m= 56, sd= 0

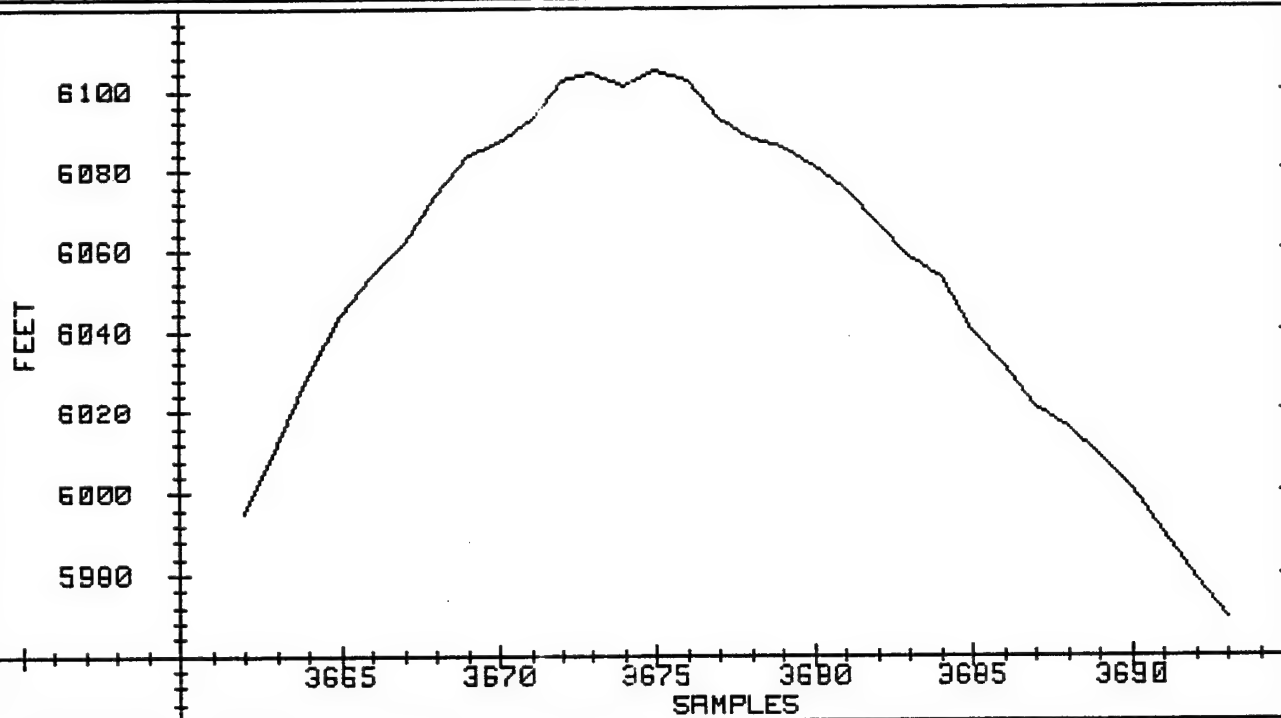


GPS ALTITUDE

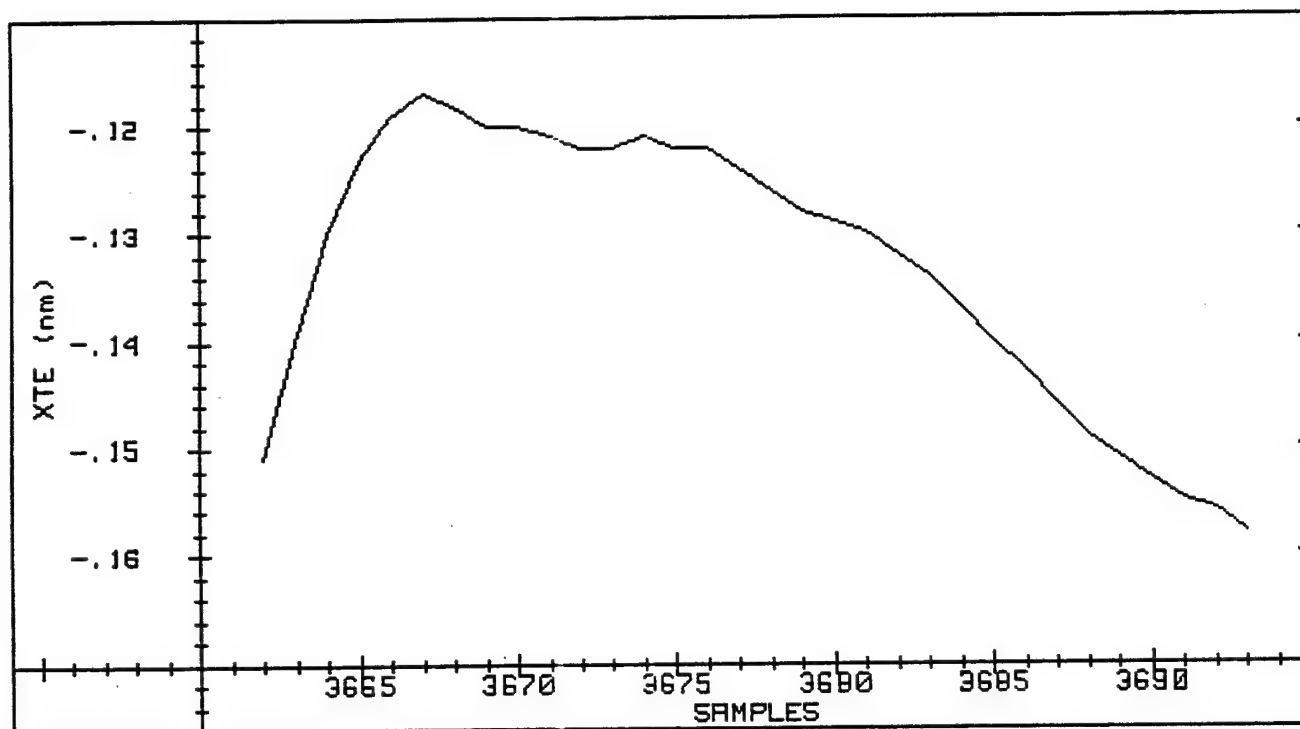
MEAN= 6053.25 STANDARD DEVIATION= 40.2779

DATE: June 26, 1995 PASS 26

OFF
ON
BAR

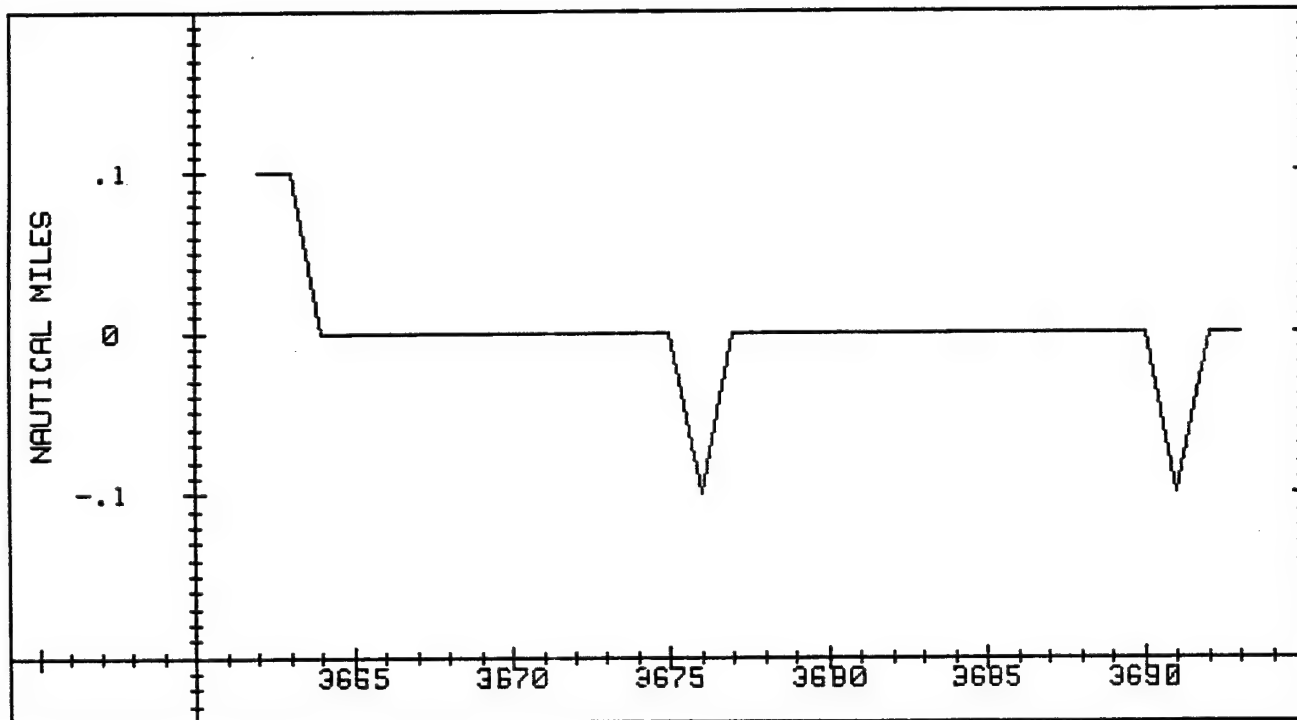


GPS Cross Track Error
MEAN= -.133062 STANDARD DEVIATION= .0129782
DATE: June 26, 1995 PASS 26

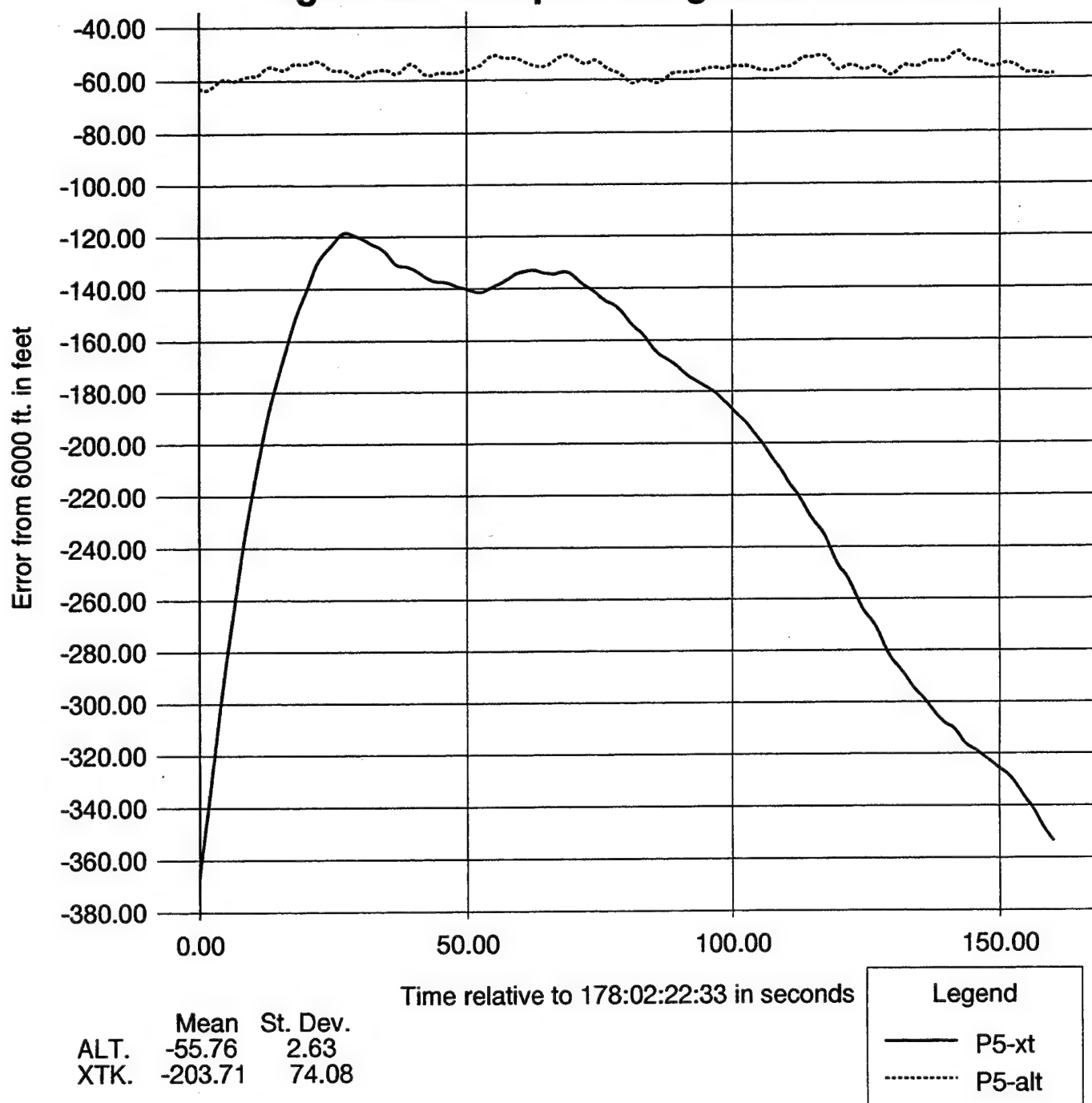


INS CROSS TRACK ERROR

MEAN= 0 STANDARD DEVIATION= .0353553
DATE: June 26, 1995 PASS 26



Portage, ME - June 26, 1995 - Pass 26 - Xtk. and Alt. Errors Higher alt. and port are greater than zero



27 Jun 1995
Tape: E1414

Post-line Data Sheet
Line 2
Mission: PORTAGE MAINE, DAY

Time: 178:02:35:33
Pass 27
Req.# 2

AIRCRAFT & CHANNEL DATA

Altitude			CH 1	CH 2	CH 3	CH 4
Desired:	13500 ft	Wave/Pol.:	X-HH	L-HH	C-HH	L-VV
Baro:	13315 ft s.d.=	3 Swath Ctr Ang:	40.0°	40.0°	40.0°	40.0°
Slt. rng:	19975 ft	Tgt Dep Ang:	40.0°	40.0°	40.0°	40.0°
Look:	Left	St rng (ft):	11915	11915	11915	11915
Depr Ang:	25.0°	Near Rng Dep:	90.0°	90.0°	90.0°	90.0°
Des. trk:	186.0°	Far Rng Dep:	28.4°	28.4°	28.4°	28.4°
Start Sq:	-90.0°	Atten (dB):	18.0	36.0	20.0	33.0
End Sq:	-90.0°	RMS Video (%FS)	10.3	23.0	25.3	32.0

WAYPOINTS

Line_up:	N 47:01.89	W 68:31.61	Main Target:	GP
Start:	N 46:49.96	W 68:33.44	Mocomp Point:	
End:	N 46:40.02	W 68:34.96	Lat:	N 46:44.73
			Long:	W 68:30.56
From:	N 63:14.50	W 64:46.38	Tgt Trk:	0.0
To:	N 30:07.76	W 70:33.17	Tgt Vel:	0.0
			Alt:	660.0 ft

RADAR PARAMETERS - for XLC

RTP Channel:	1	Filter damping is Hi	->	10 sec
Resolution:	High	PRF Factor is FAST	(262.5 kts)	-
Swath width:	Single	Ave Gndspd:	Real	-> 255.0 kts
RMS Time Constant:	2^7	Mocomp On		
Position Reference:	ON	GPS Vel/Pos Reference		
Atten. Tracking:	OFF	Adj Gnd Scene:	5000.0 ft	
Range Gate Delta:	0.0 ft	Range Tracking is	OFF	
Azimuth Presum Rate:	Presum6	Clutterlock Reference:	OFF	

Ave Ref Vel -> 20.1 fps (s.d.= 2.3)
Ave Fil Vel -> 22.9 fps (s.d.= 2.1)

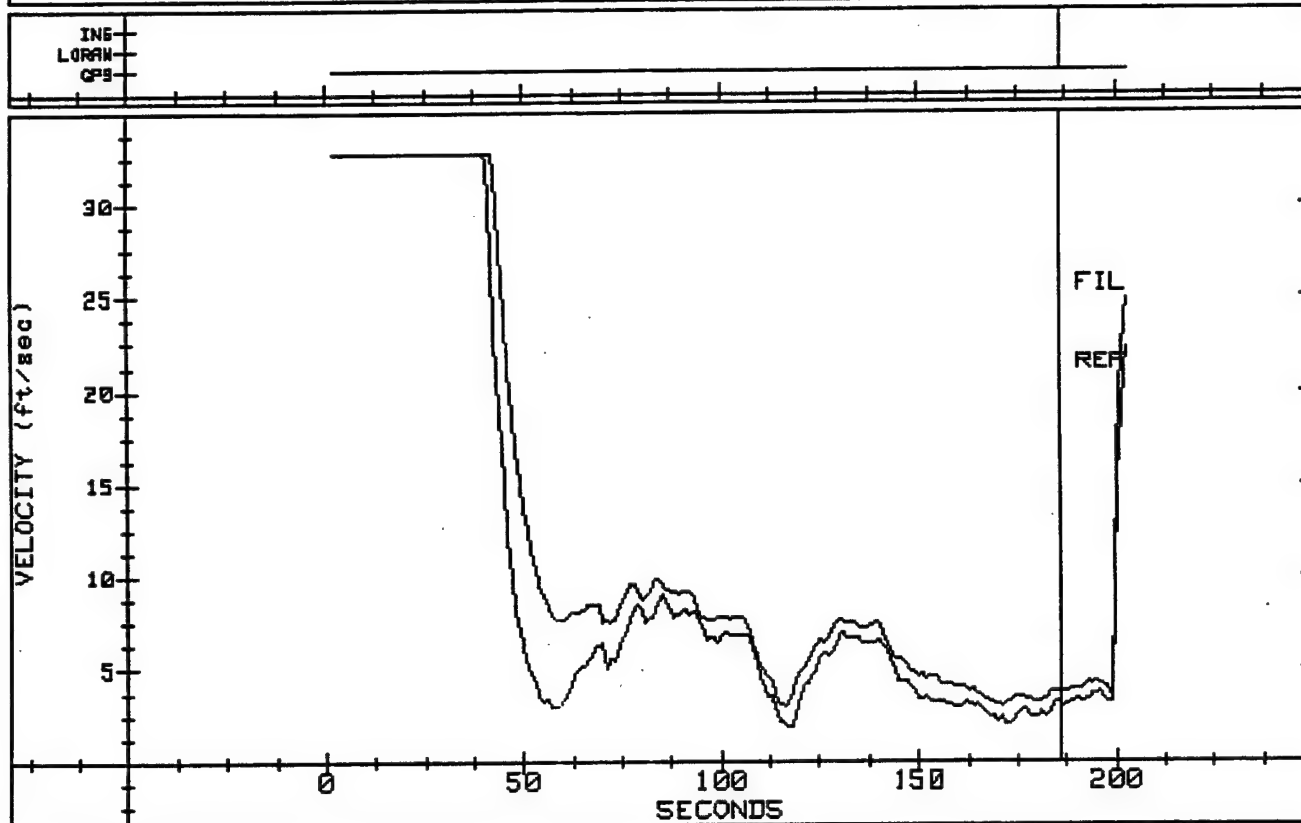
NML XMIT PWR	ANT BIAS	Tape Footage	Drive no.
X: -31.7	Elevation:	0.0°	
L: -31.4	Azimuth:	0.0°	Starting: 1475 ft (2)
C: -37.4	Pitch:	0.0°	Ending: 0 ft (2)
P: -70.0			

Vel Bias	CAL Atten	LINE Map Time (UCT)
X: 1035.0	X: 63.8 dB	Start: 02:35:33
Y: -433.0	L: 63.8 dB	End: 02:35:35
Z: 6697.0	C: 63.8 dB	

Mocomp Counters

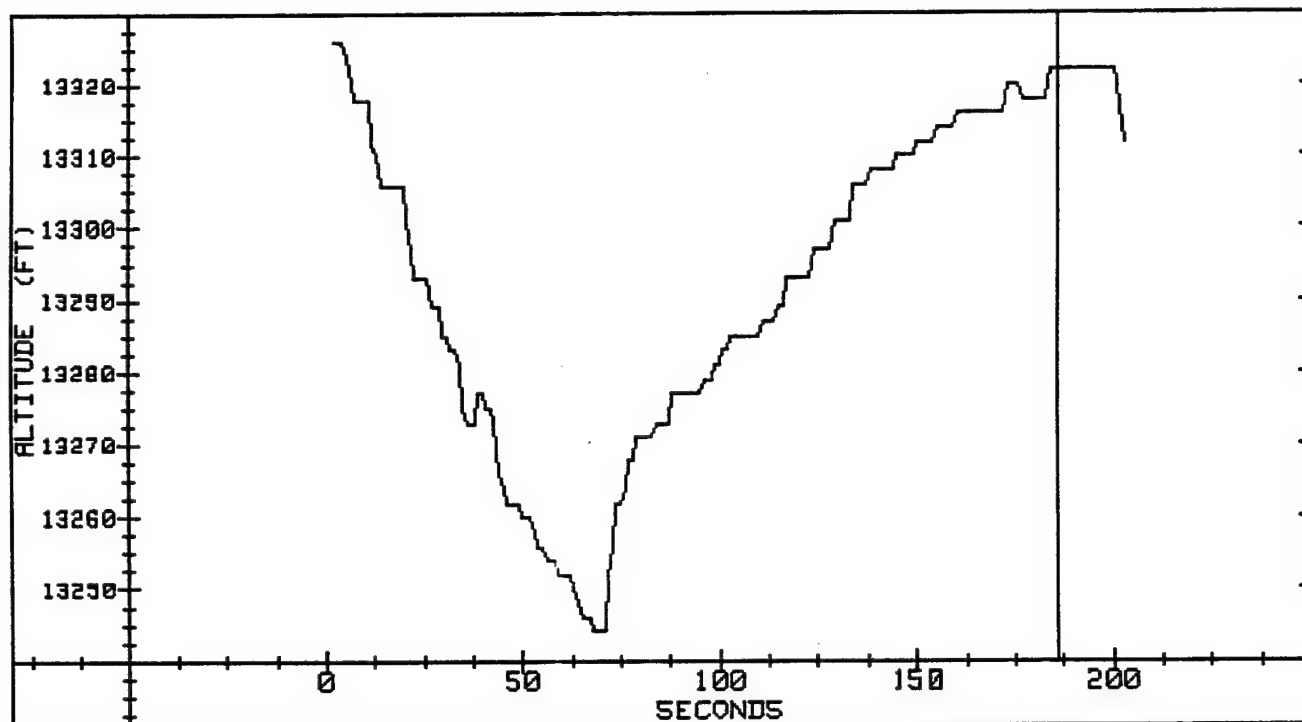
Start:	1554630	0017B8C6h	CPA (UCT):	00:00:00
End:	1522549	00173B75h	Alt:	0 ft (GPS)
			Lat: N	0:00: 0
			Lon: E	0:00: 0

FILTERED vs. REF. VELOCITY
DAY 178 TIME 2:32 PASS 27



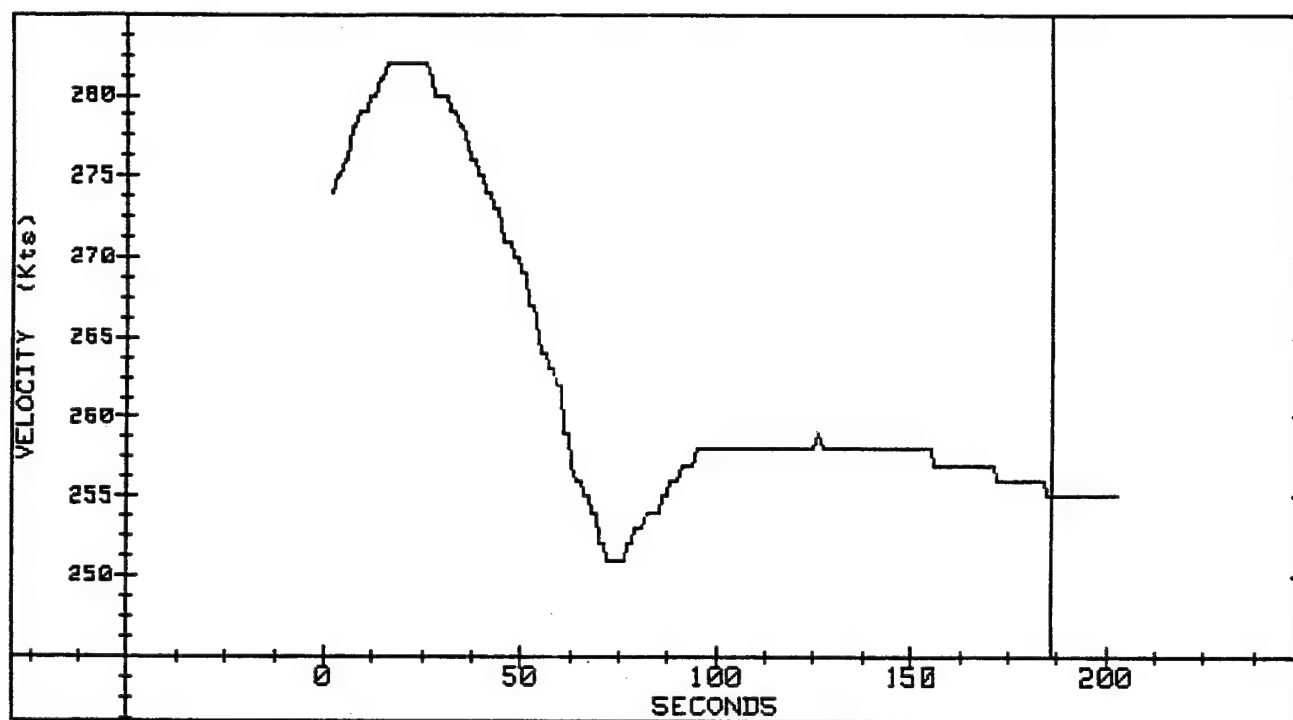
BARO ALTITUDE

DAY 178 TIME 2:32 PASS 27 m= 13320, sd= 3.39935



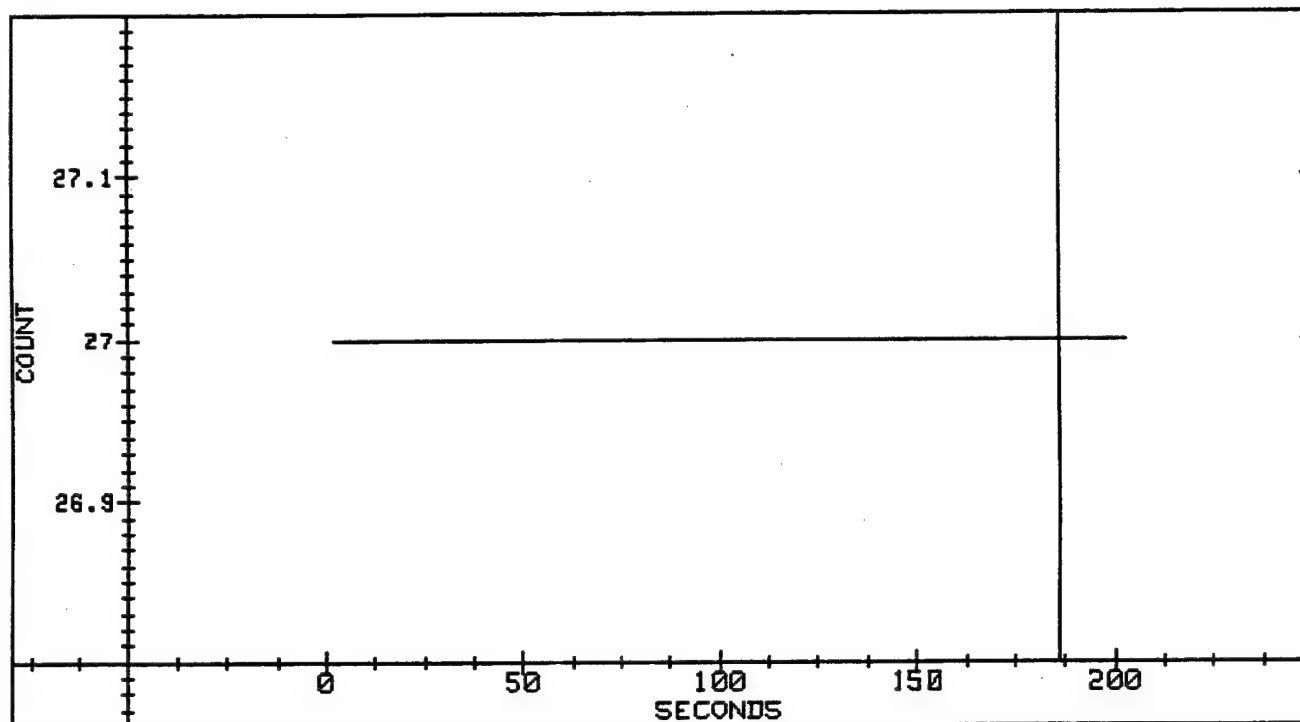
INS GROUND SPEED

DAY 170 TIME 2:32 PASS 27 m= 255. sd= 0



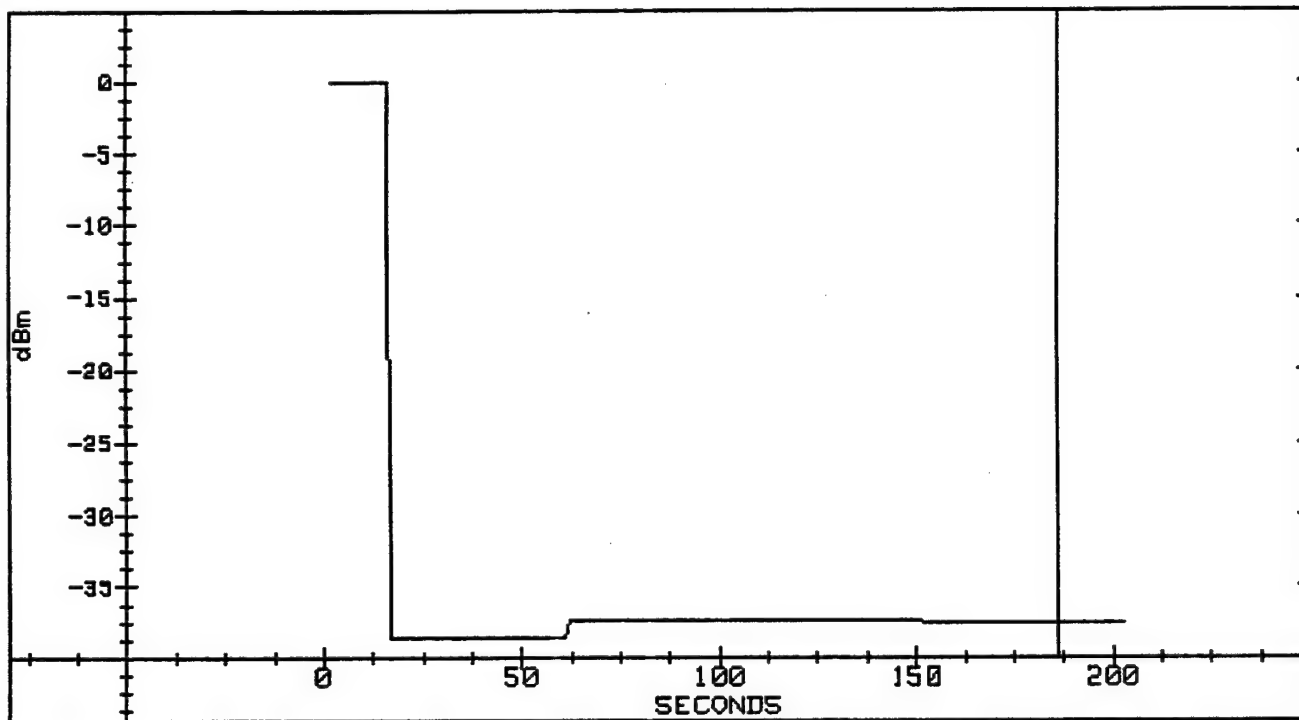
PASS NUMBER

DAY 170 TIME 2:32 PASS 27 m- 27, sd- 0



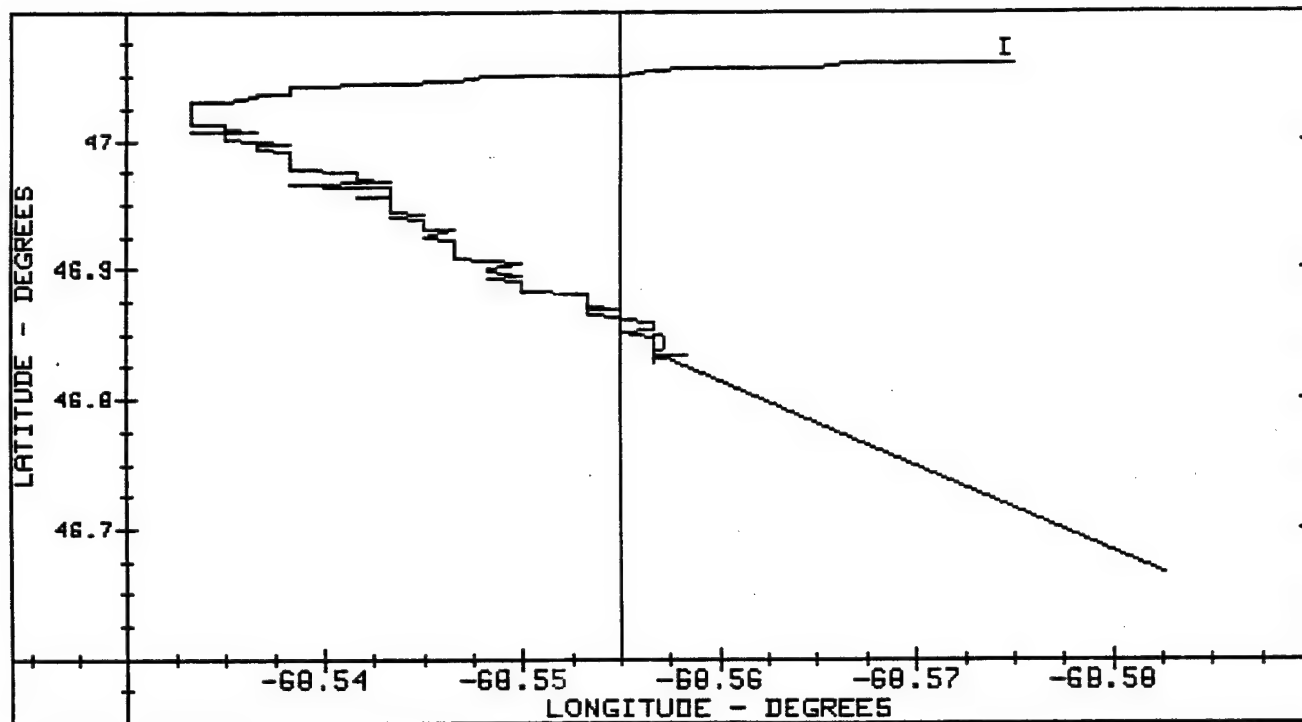
C Band Power

DAY 170 TIME 2:32 PASS 27 m= -37.5, sd= 0



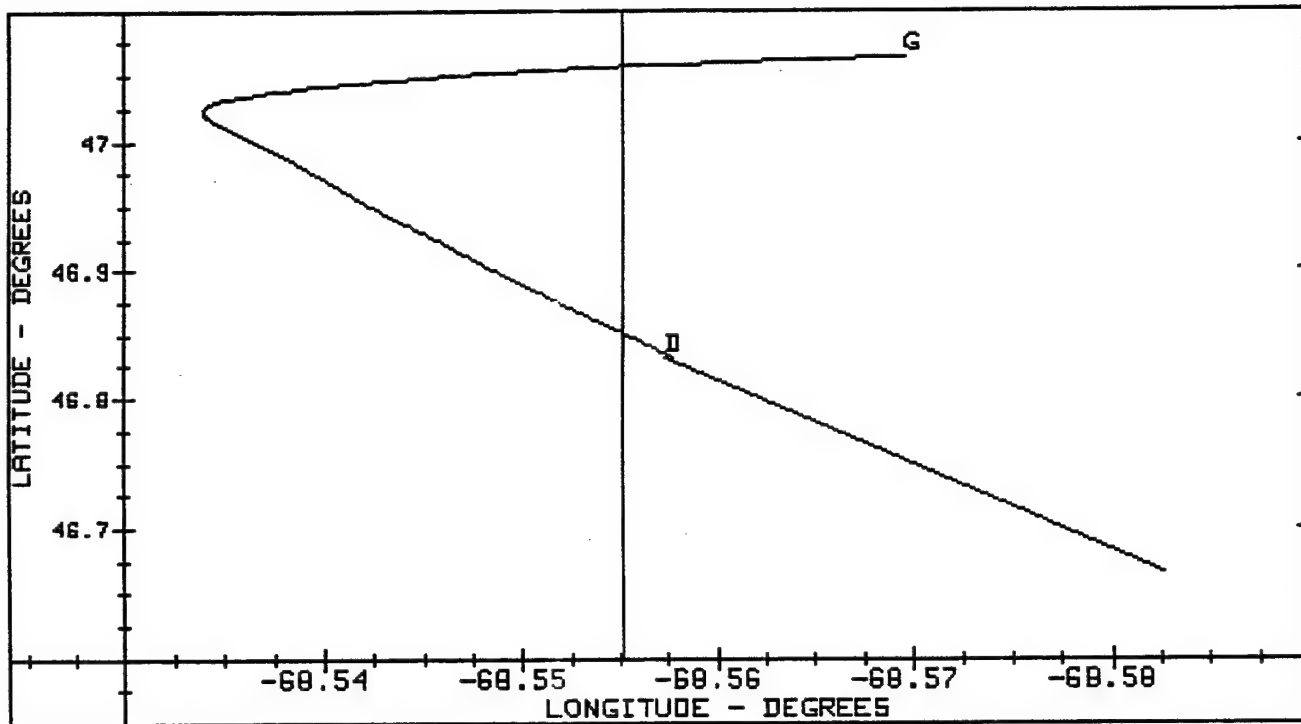
INS AIRCRAFT POSITION

DAY 178 TIME 2:32 PASS 27



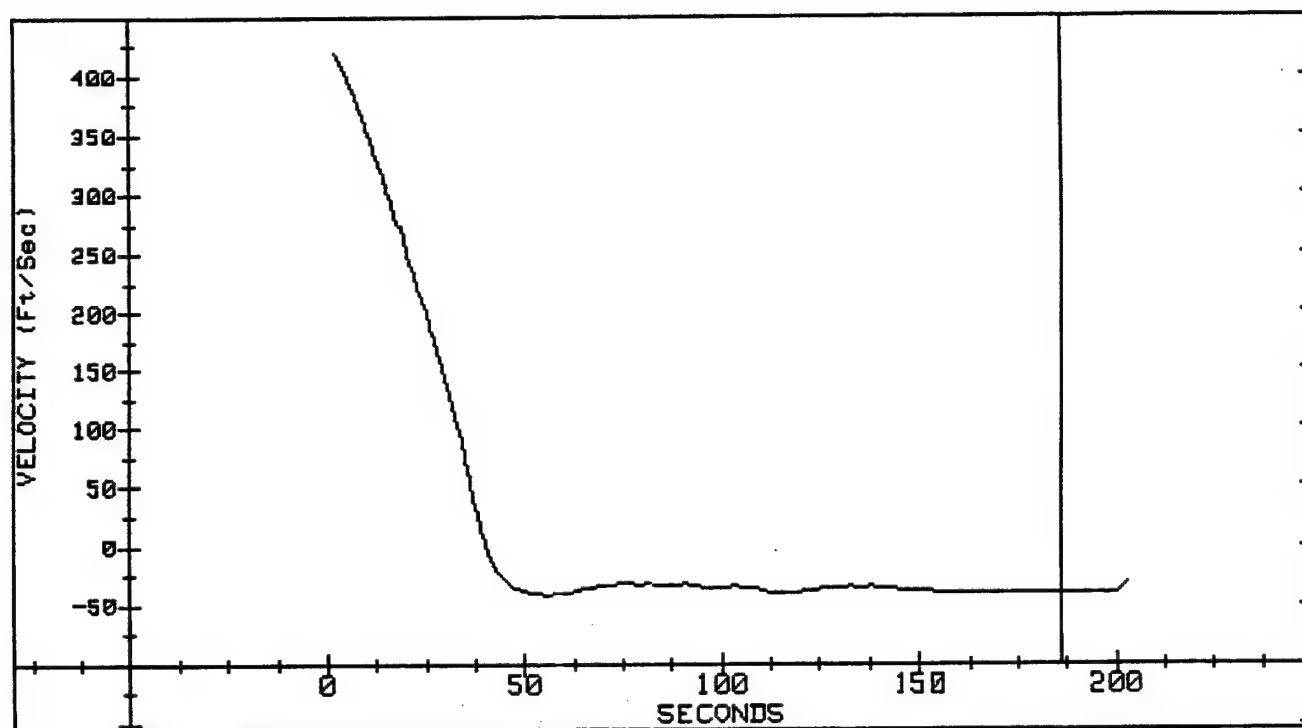
GPS AIRCRAFT POSITION

DAY 178 TIME 2:32 PASS 27



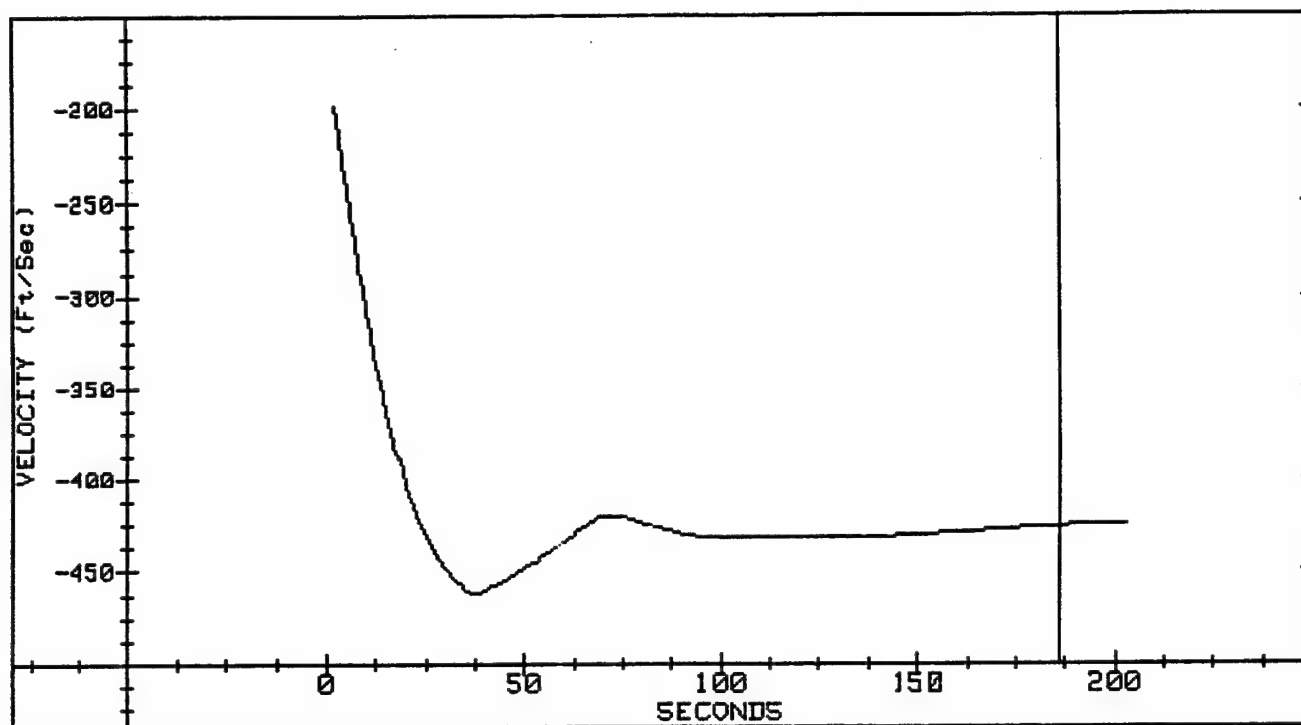
GPS V_e

DAY 178 TIME 2:32 PASS 27 m= -34.60, sd= 2.45537



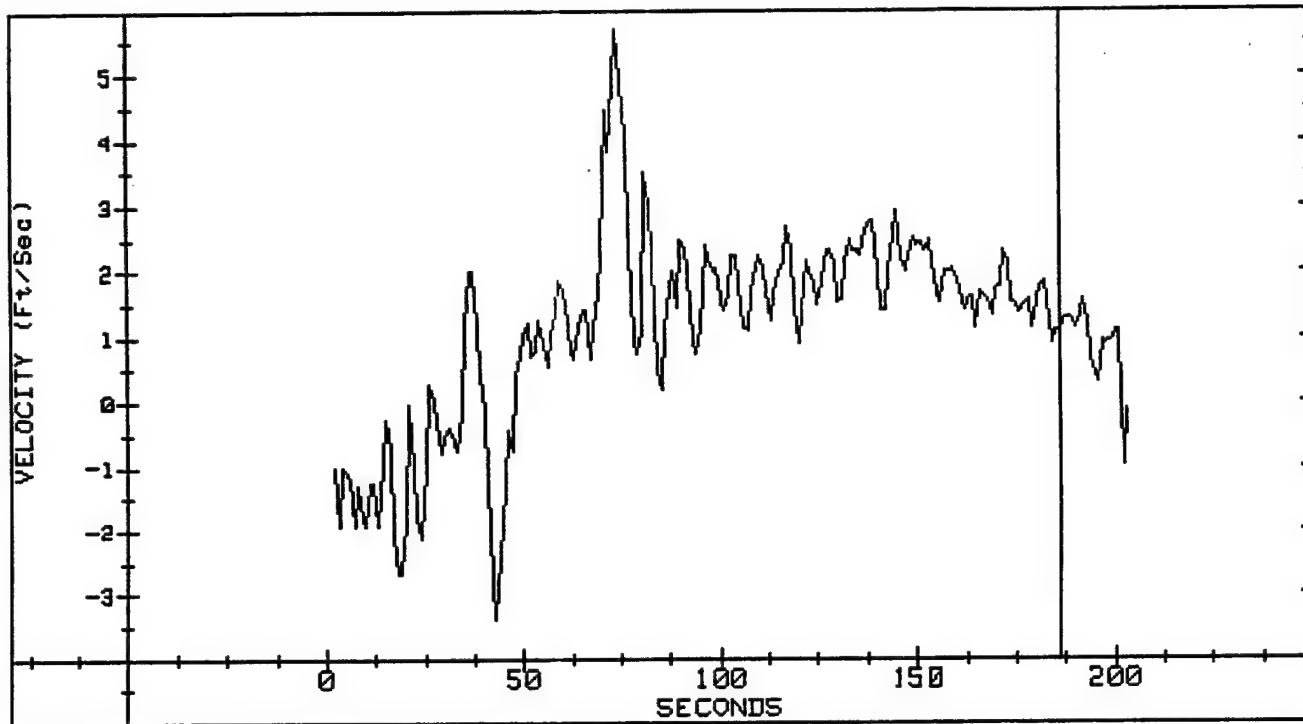
GPS Vn

DAY 178 TIME 2:32 PASS 27 m= -424.3, sd= .140529



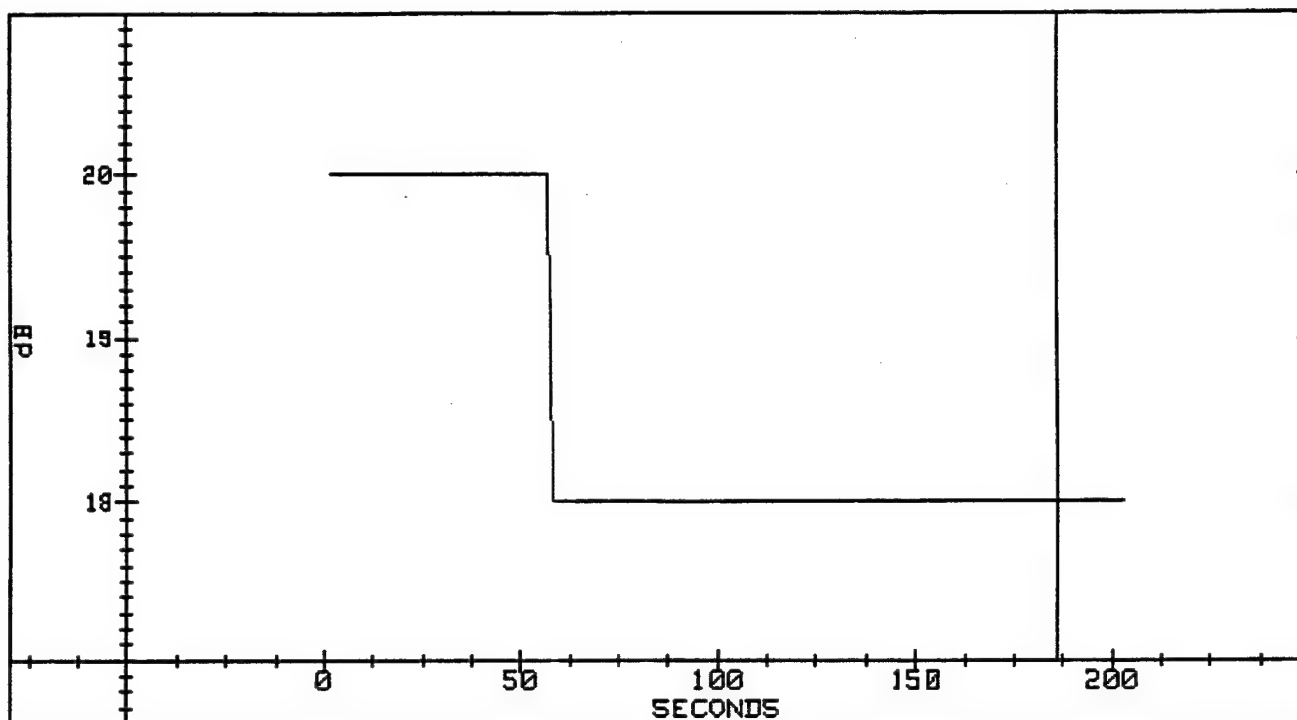
GPS Vv

DAY 178 TIME 2:32 PASS 27 m= .01042, sd= .045228



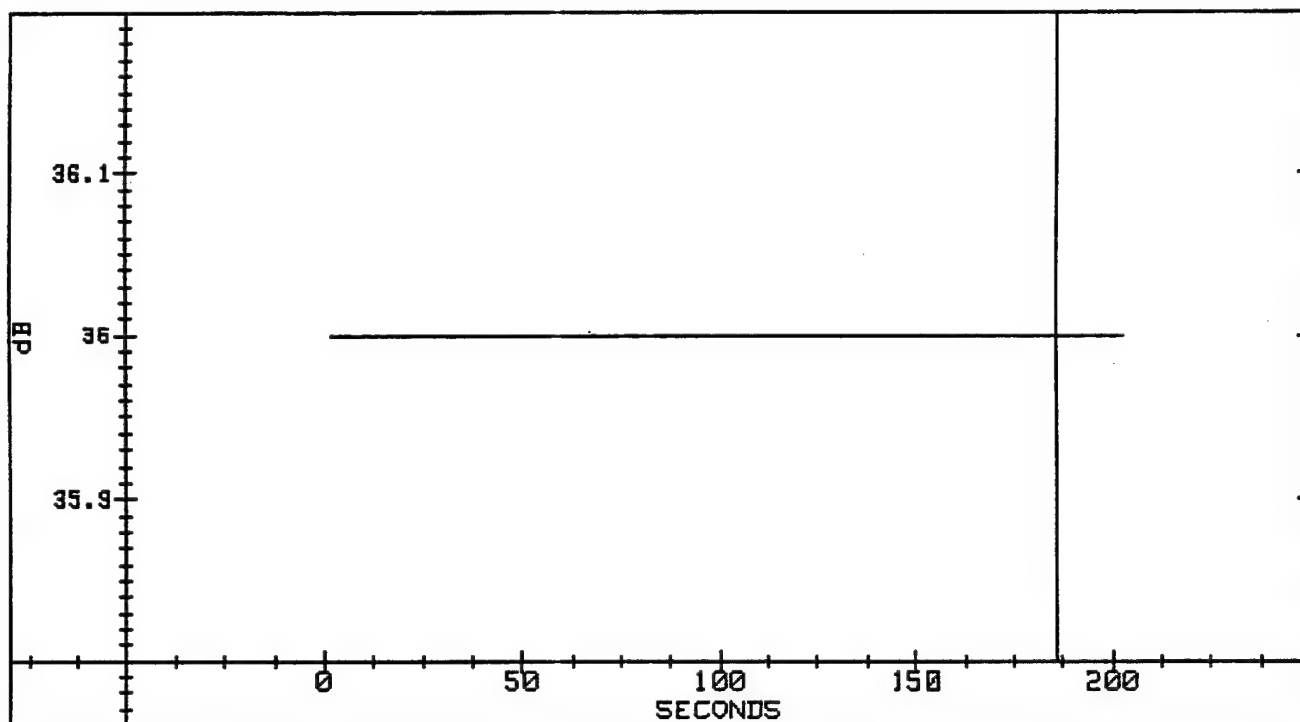
Ch1 RES Attenuation

DAY 178 TIME 2:32 PASS 27 m= 18, sd= 0



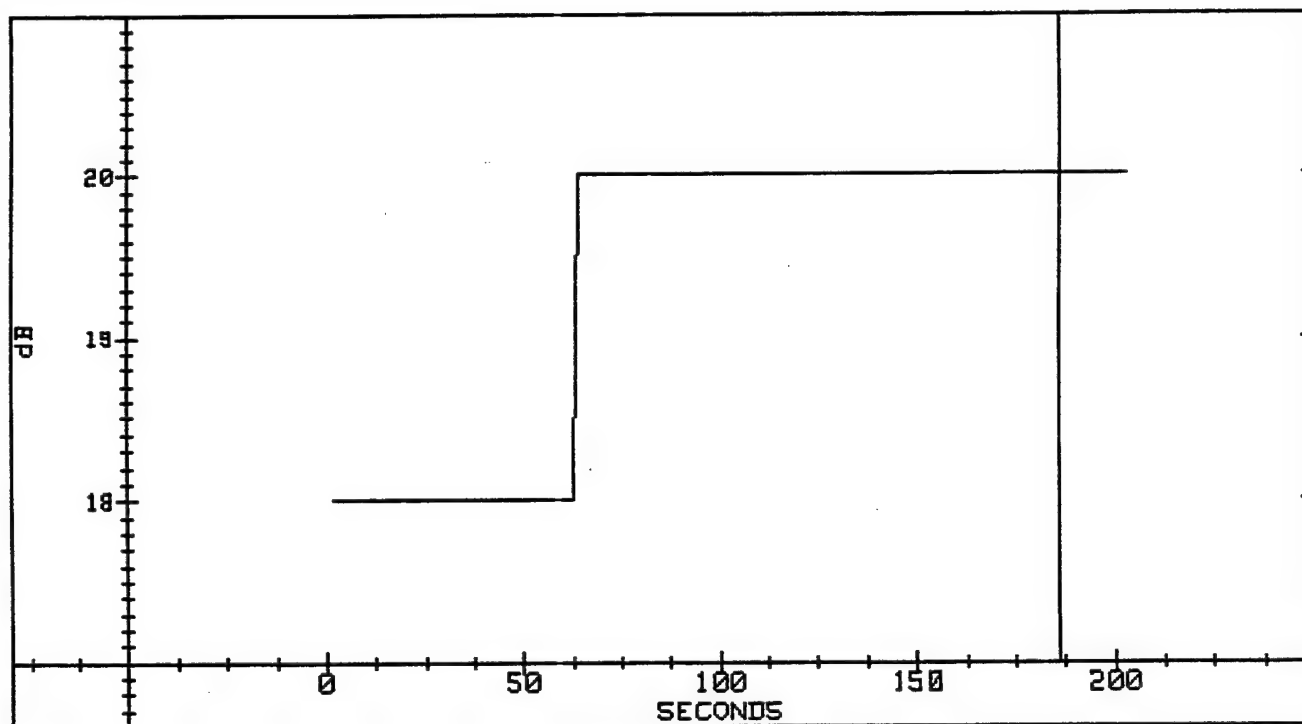
Ch2 RES Attenuation

DAY 178 TIME 2:32 PASS 27 m= 36, sd= 0



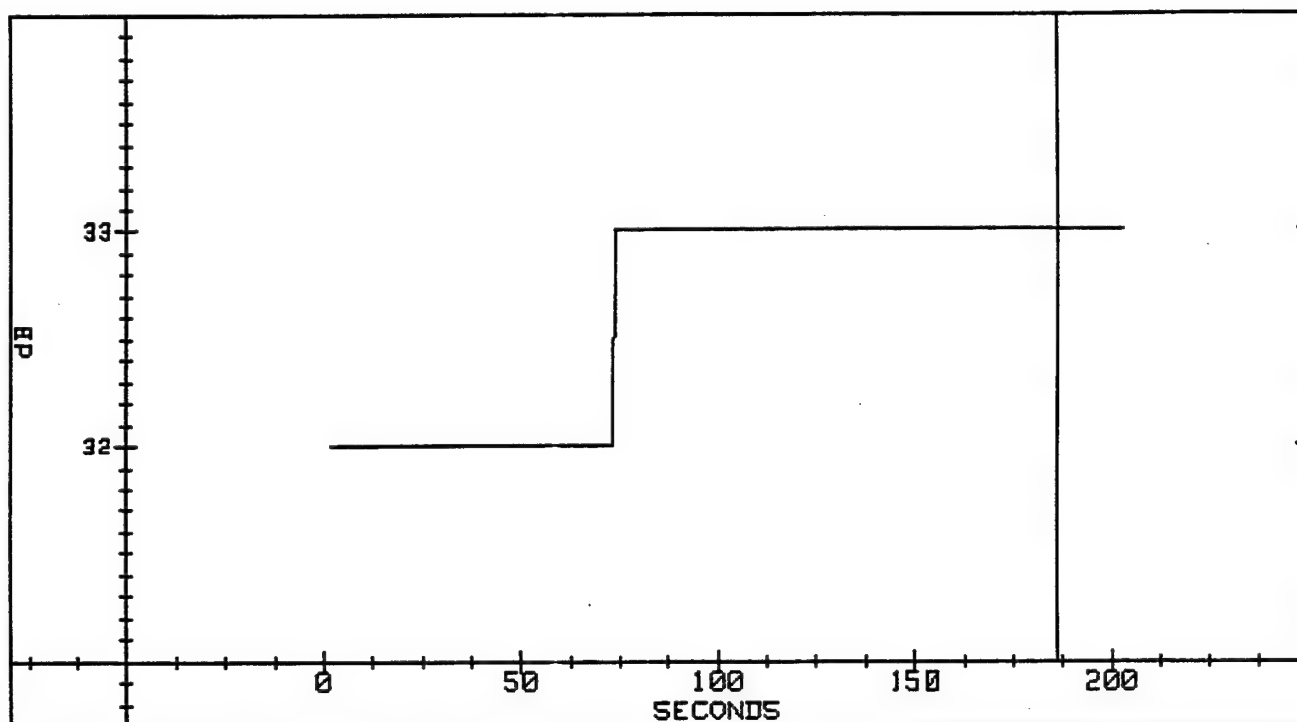
Ch3 RES Attenuation

DAY 178 TIME 2:32 PASS 27 m= 20, sd= 0

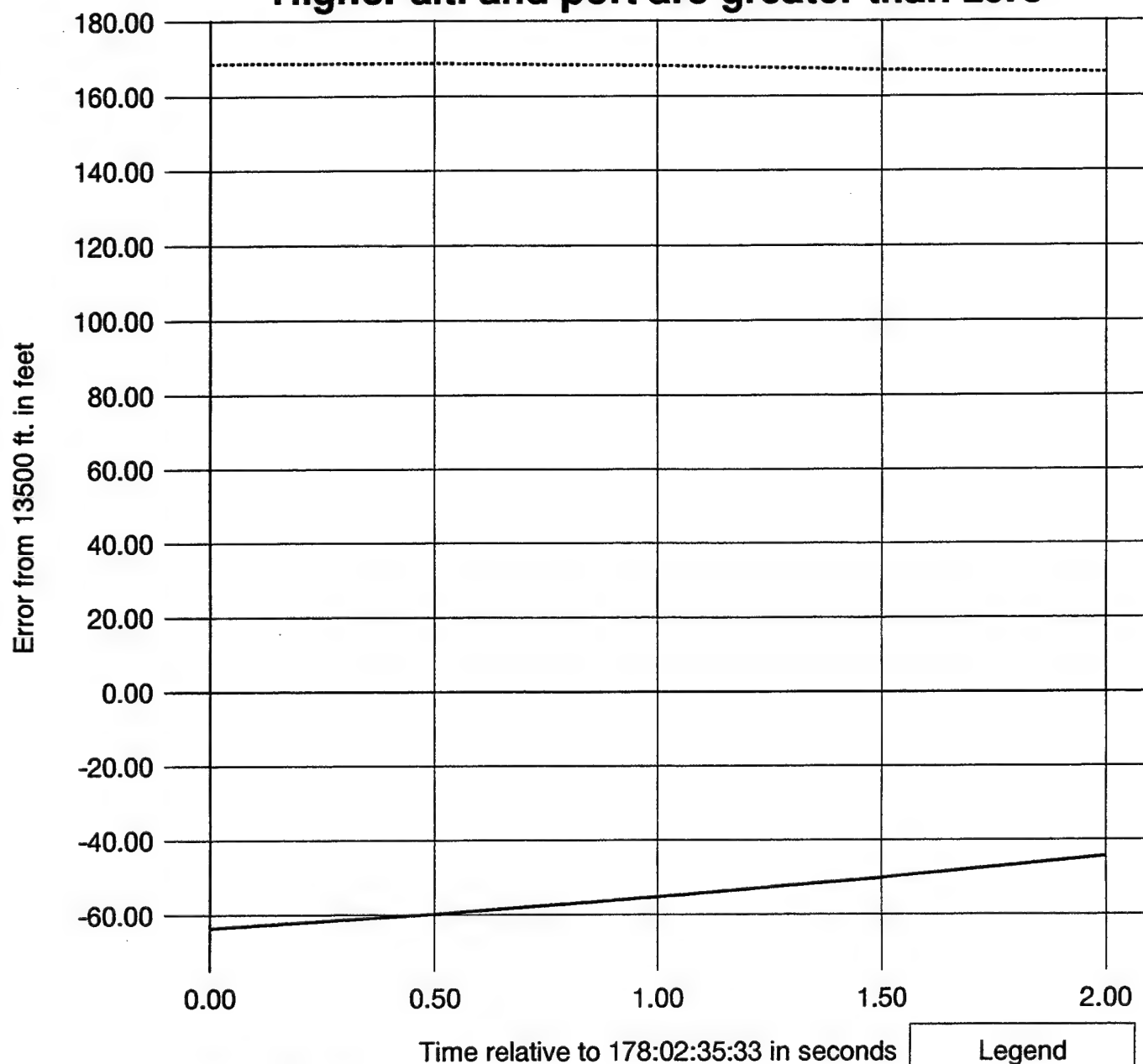


Ch4 RES Attenuation

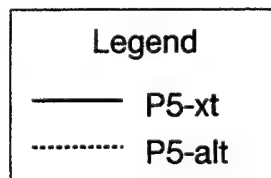
DAY 178 TIME 2:32 PASS 27 m= 33, sd= 0



Portage, ME - June 26, 1995 - Pass 27 - Xtk. and Alt. Errors Higher alt. and port are greater than zero



	Mean	St. Dev.
ALT.	167.49	1.14
XTK.	-54.60	7.61



27 Jun 1995
Tape: E1414

Post-line Data Sheet
Line 2
Mission: PORTAGE MAINE, DAY

Time: 178:02:45:32
Pass 28
Req.# 2

AIRCRAFT & CHANNEL DATA

Altitude		CH 1	CH 2	CH 3	CH 4		
Desired:	13500 ft	X-HH	L-HH	C-HH	L-VV		
Baro:	13329 ft s.d.=	2	Swath Ctr Ang:	40.0°	40.0°	40.0°	40.0°
Slt. rng:	19975 ft	Tgt Dep Ang:	40.0°	40.0°	40.0°	40.0°	40.0°
Look:	Left	St rng (ft):	11915	11915	11915	11915	11915
Depr Ang:	25.0°	Near Rng Dep:	90.0°	90.0°	90.0°	90.0°	90.0°
Des. trk:	186.0°	Far Rng Dep:	28.4°	28.4°	28.4°	28.4°	28.4°
Start Sq:	-90.0°	Atten (dB):	18.0	36.0	20.0	33.0	
End Sq:	-90.0°	RMS Video (%FS)	8.4	24.1	23.6	31.5	

WAYPOINTS

	Latitude	Longitude
Line up:	N 47:01.89	W 68:31.61
Start:	N 46:49.96	W 68:33.44
End:	N 46:40.02	W 68:34.96
From:	N 63:14.50	W 64:46.38
To:	N 30:07.76	W 70:33.17

Main Target: GP
Mocomp Point:
Lat: N 46:44.73
Long: W 68:30.56
Tgt Trk: 0.0 Tgt Vel: 0.0
Alt: 660.0 ft

RADAR PARAMETERS - for XLC

RTP Channel: 1
Resolution: High
Swath width: Single
RMS Time Constant: 2^7
Position Reference: ON
Atten. Tracking: OFF
Range Gate Delta: 0.0 ft
Azimuth Presum Rate: Presum6

Filter damping is Hi -> 10 sec
PRF Factor is FAST (262.5 kts) -
Ave Gndspd: Real -> 251.9 kts
Mocomp On
GPS Vel/Pos Reference
Adj Gnd Scene: 5000.0 ft
Range Tracking is OFF
Clutterlock Reference: OFF

Ave Ref Vel -> 1.8 fps (s.d.= .9)
Ave Fil Vel -> 2.8 fps (s.d.= .9)

NML XMIT PWR

X: -31.7
L: -31.4
C: -37.4
P: -70.0

ANT BIAS

Elevation: 0.0°
Azimuth: 0.0°
Pitch: 0.0°

Tape Footage

Starting: 1712 ft (2)
Ending: 2768 ft (2)

Drive no.

Vel Bias

X: 1035.0
Y: -433.0
Z: 6697.0

CAL Atten

X: 63.8 dB
L: 63.8 dB
C: 63.8 dB

LINE Map Time (UCT)

Start: 02:45:32
End: 02:47:55

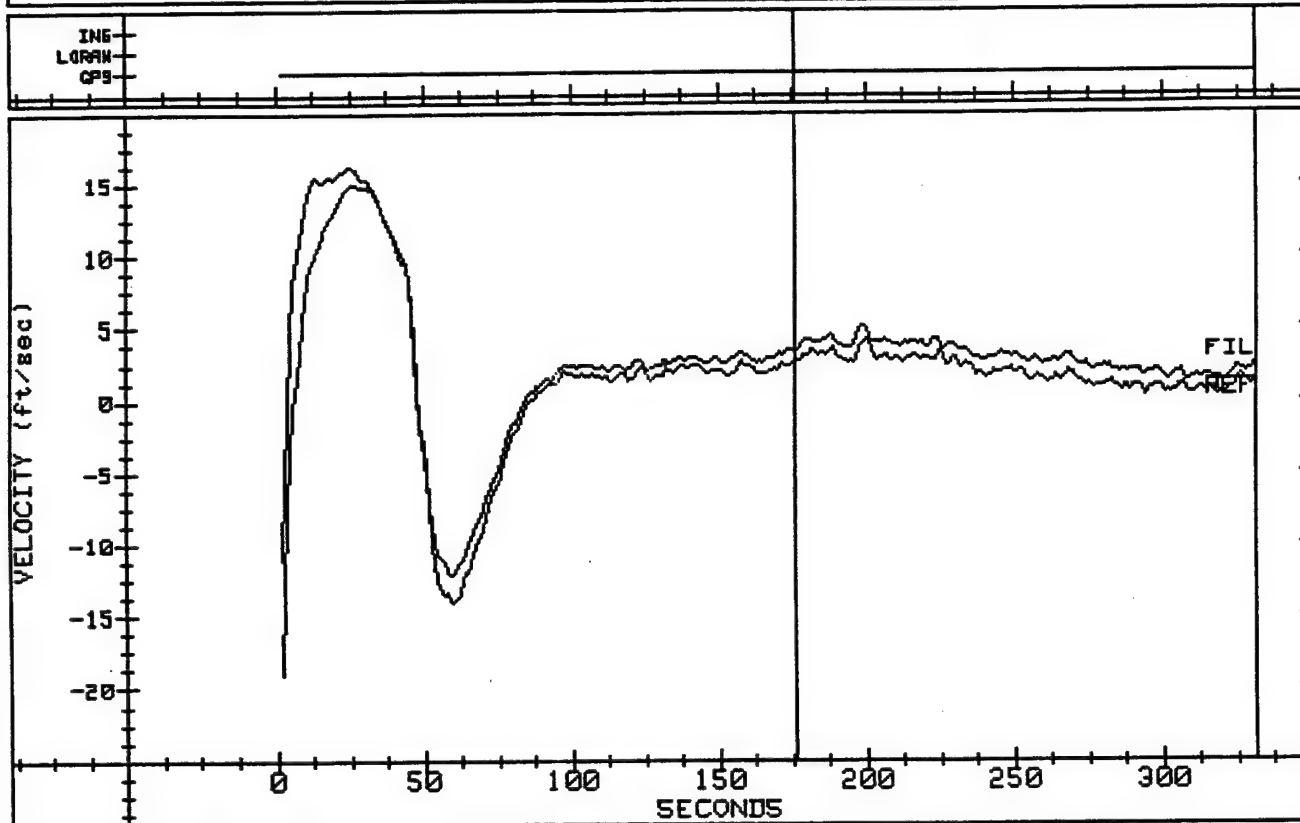
Mocomp Counters

Start: 1590807 00184617h
End: 1613787 00189FDBh

CPA (UCT): 00:00:00

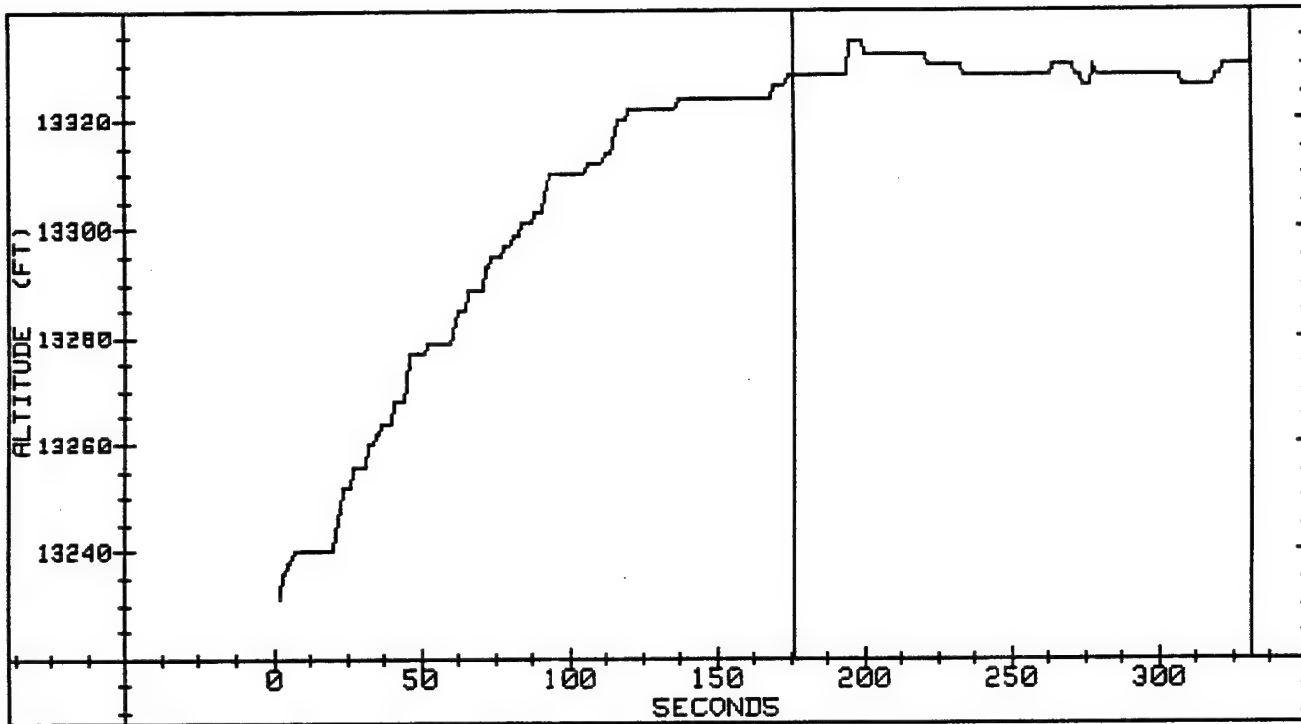
Alt: 0 ft (GPS)
Lat: N 0:00: 0
Lon: E 0:00: 0

FILTERED vs. REF. VELOCITY
DAY 170 TIME 2:42 PASS 20



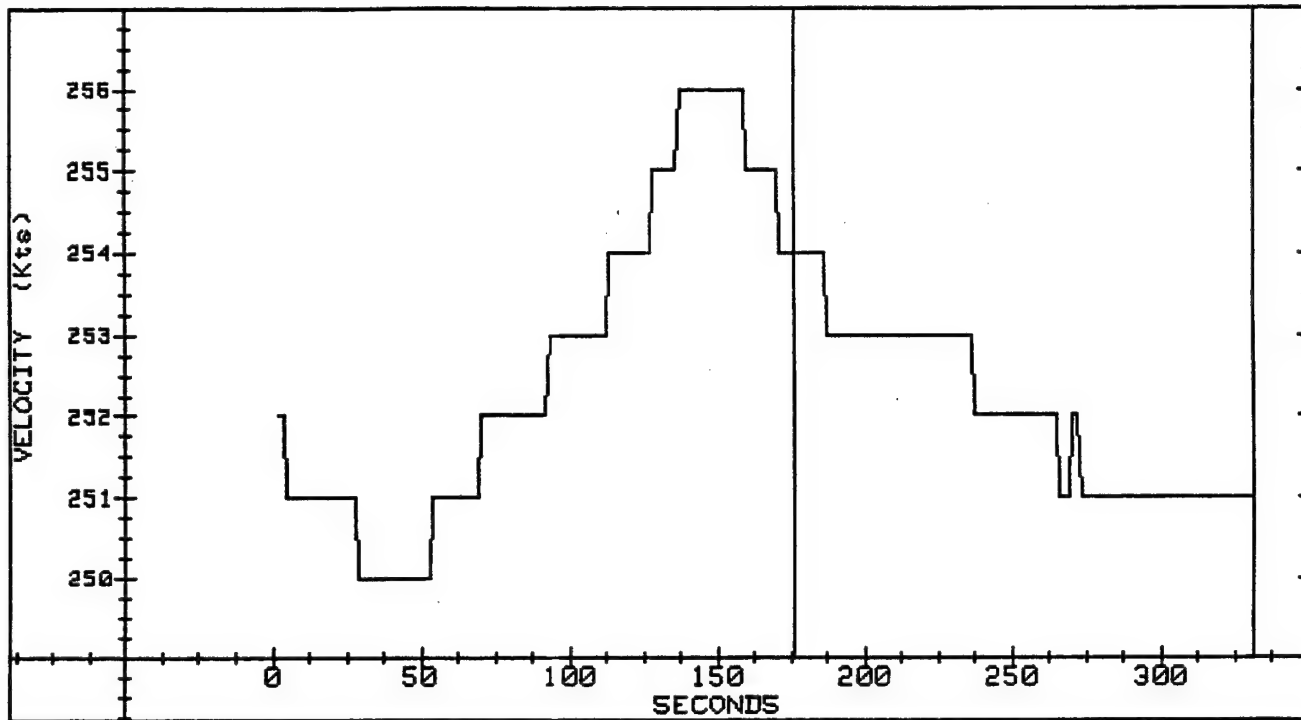
BARO ALTITUDE

DAY 178 TIME 2:42 PASS 28 m= 13330, sd= 1.97159



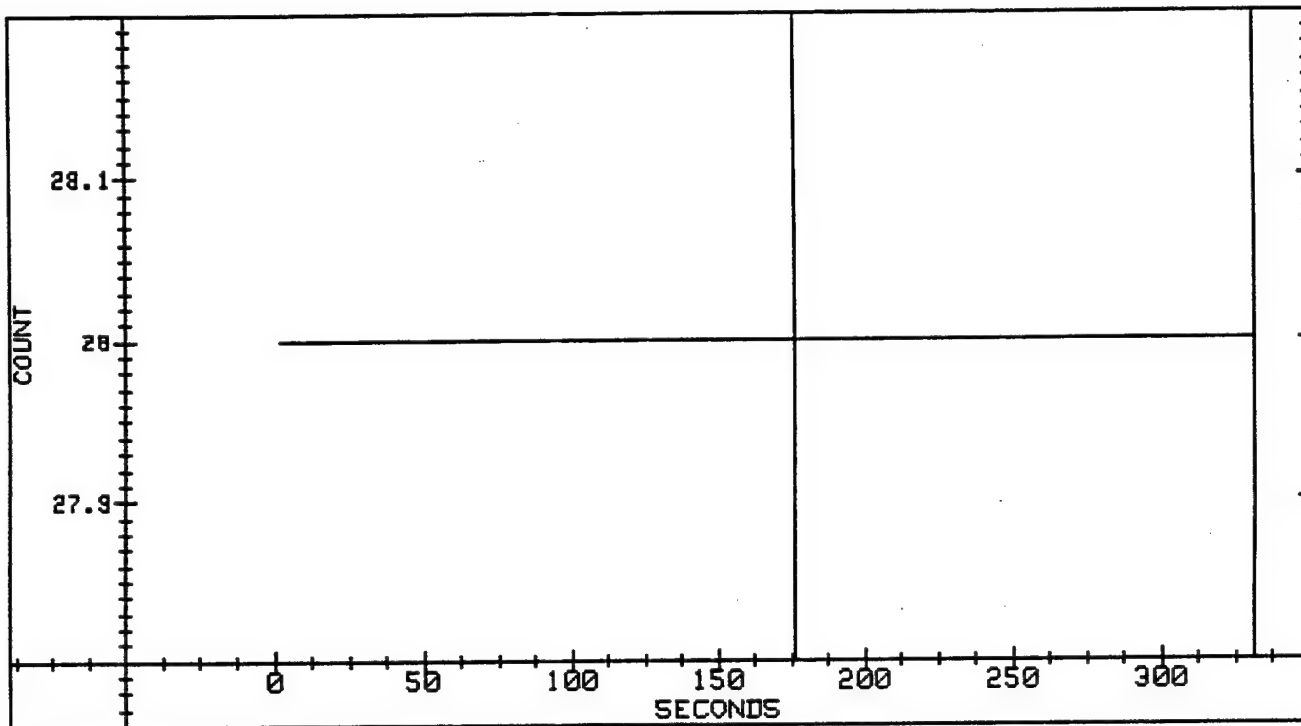
INS GROUND SPEED

DRY 178 TIME 2:42 PASS 28 m= 251.9, sd= .076542



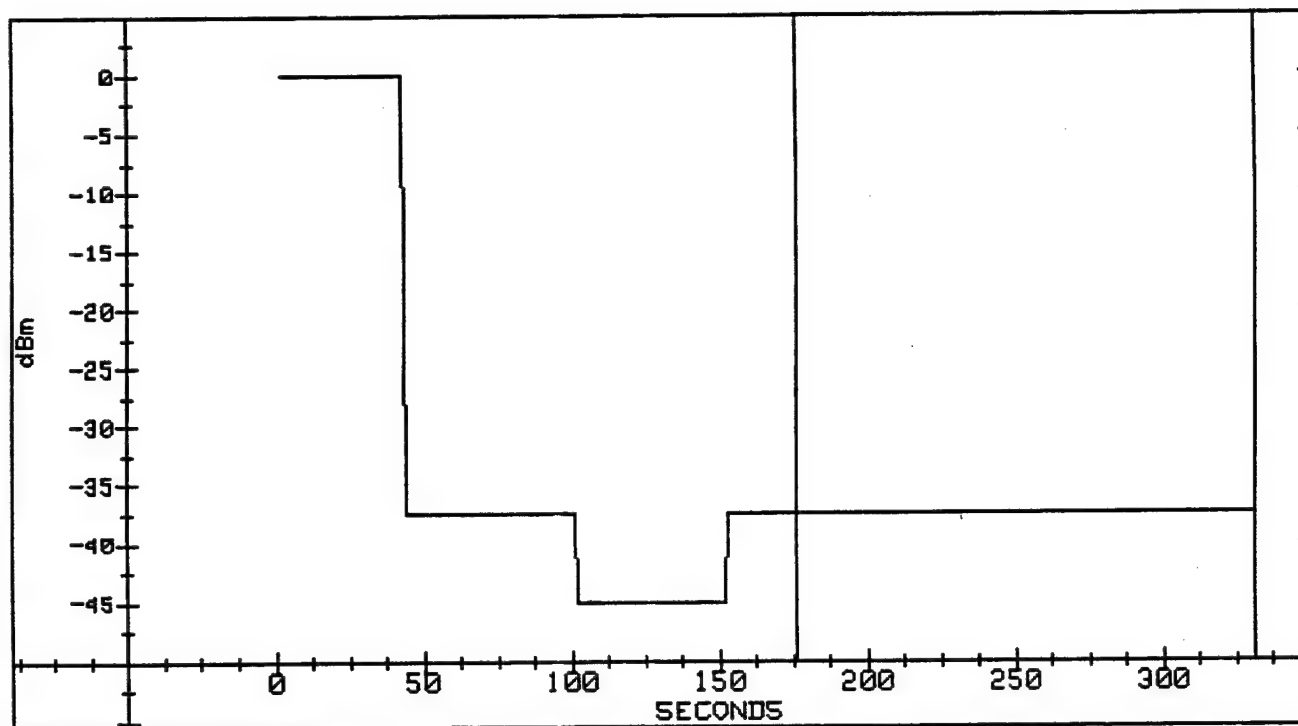
PASS NUMBER

DAY 178 TIME 2:42 PASS 28 m= 28, sd= 0



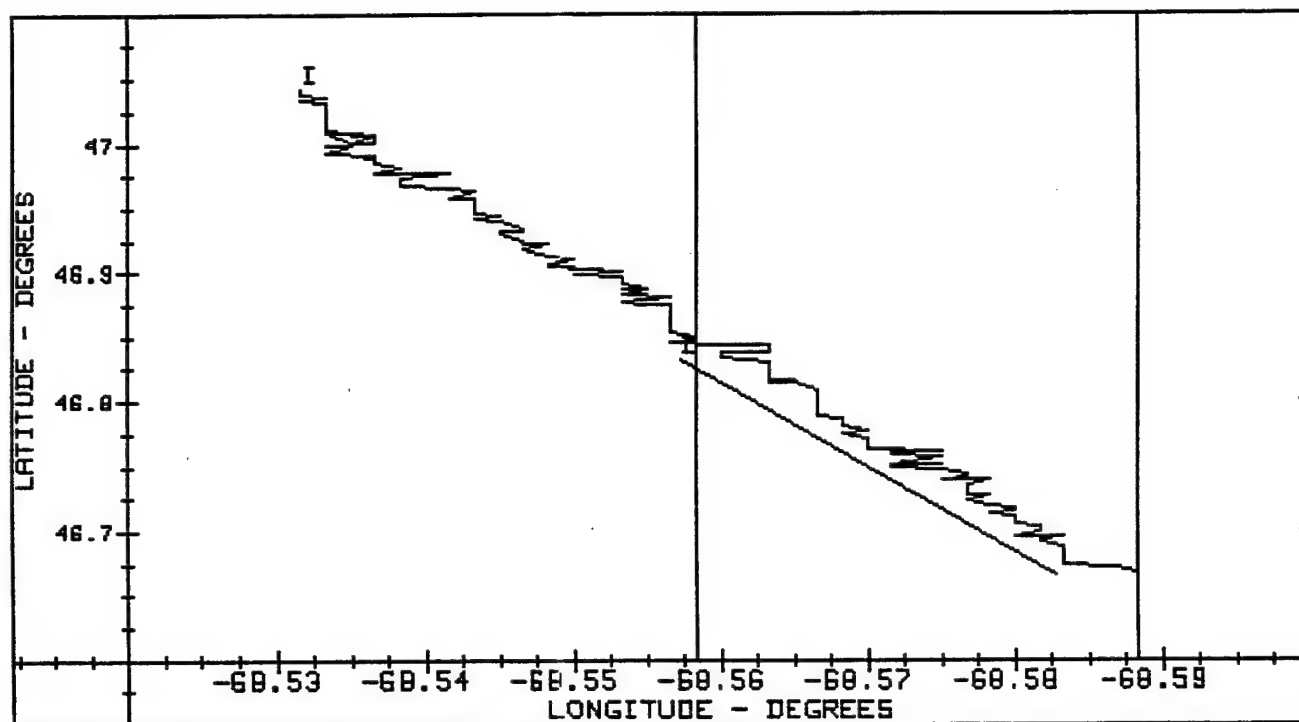
C Band Power

DAY 170 TIME 2:42 PASS 28 m= -37.55, sd= .0498261



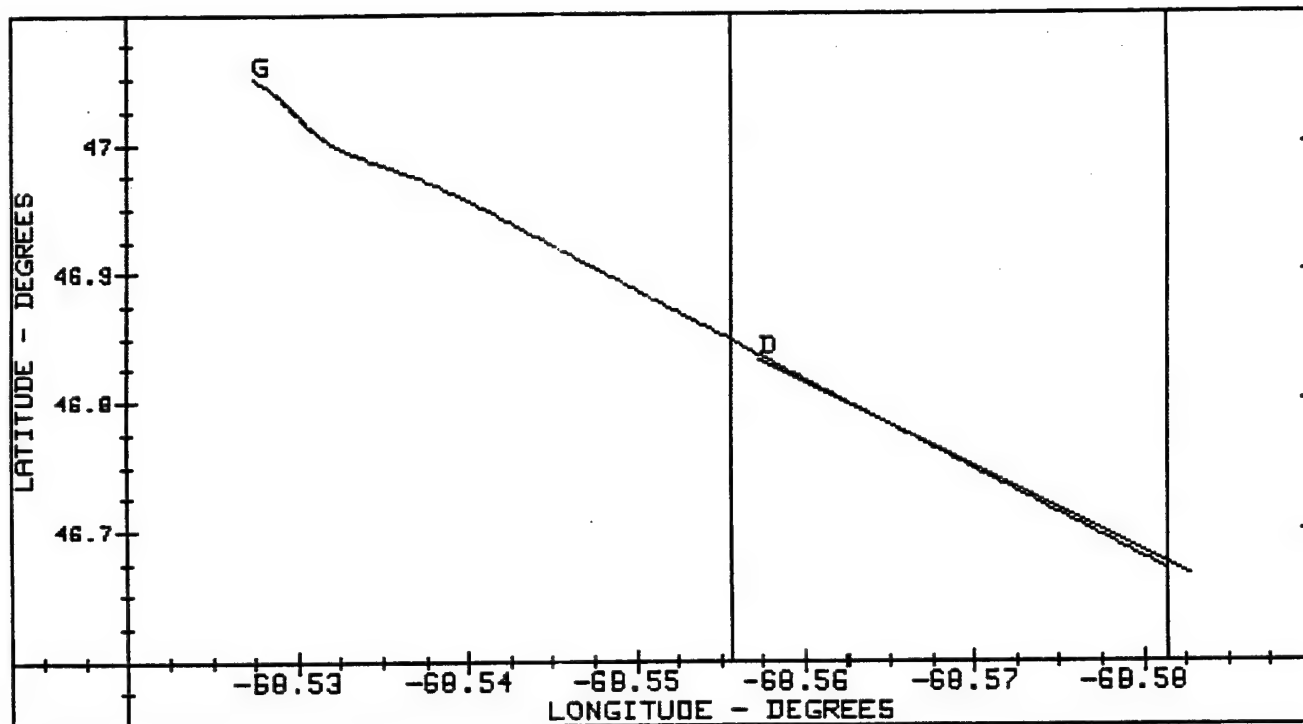
INS AIRCRAFT POSITION

DAY 170 TIME 2:42 PASS 20



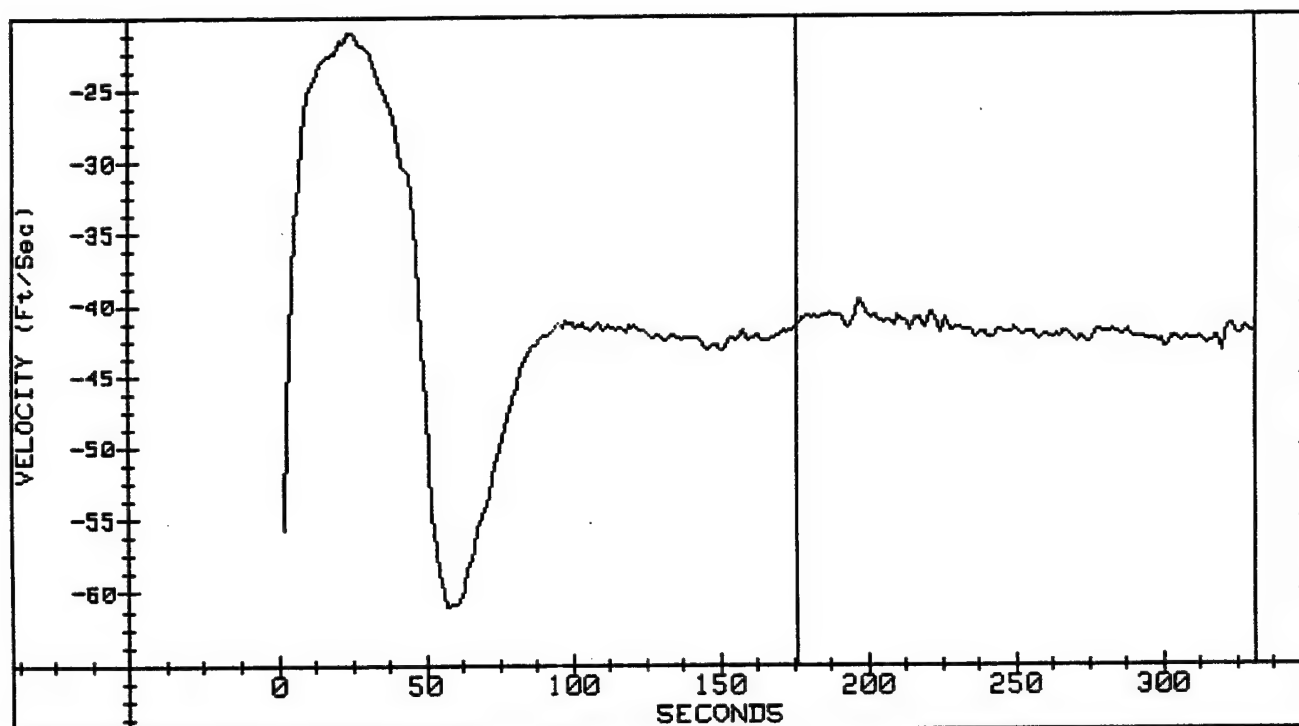
GPS AIRCRAFT POSITION

DAY 170 TIME 2:42 PASS 20



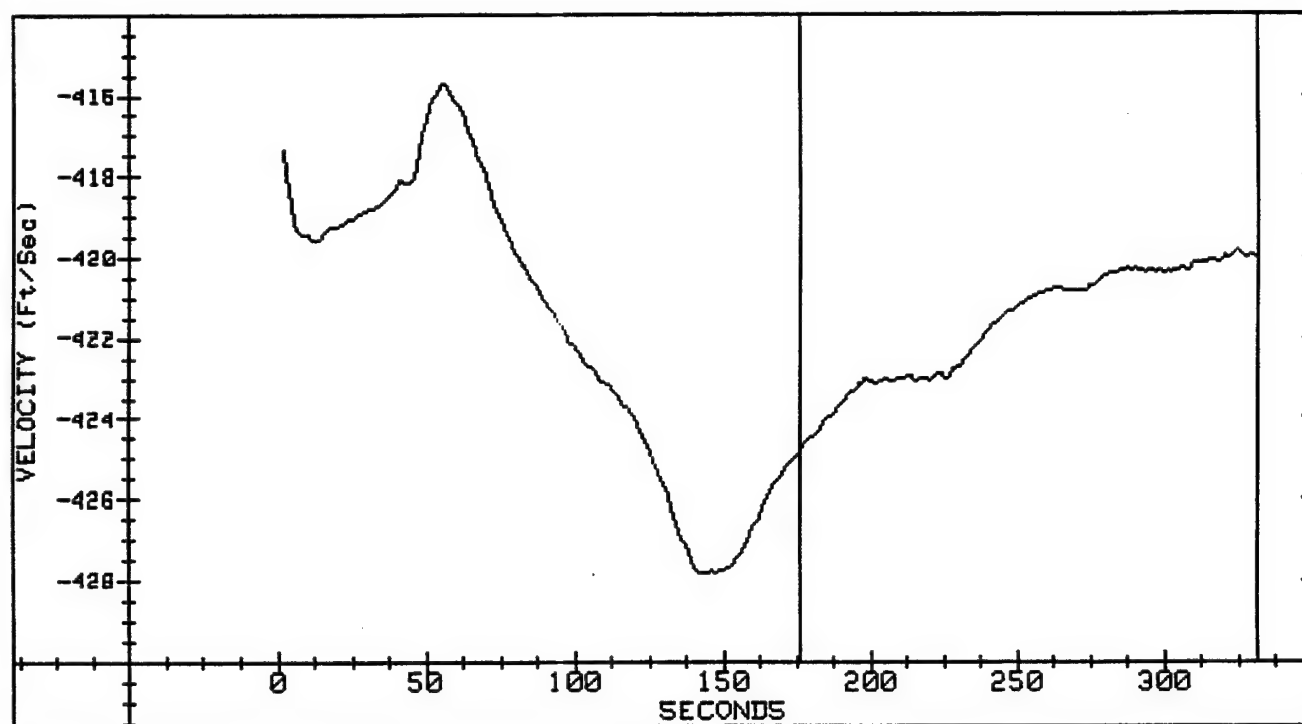
GPS V_e

DRY 178 TIME 2:42 PASS 28 m= -41.9, sd= .661716



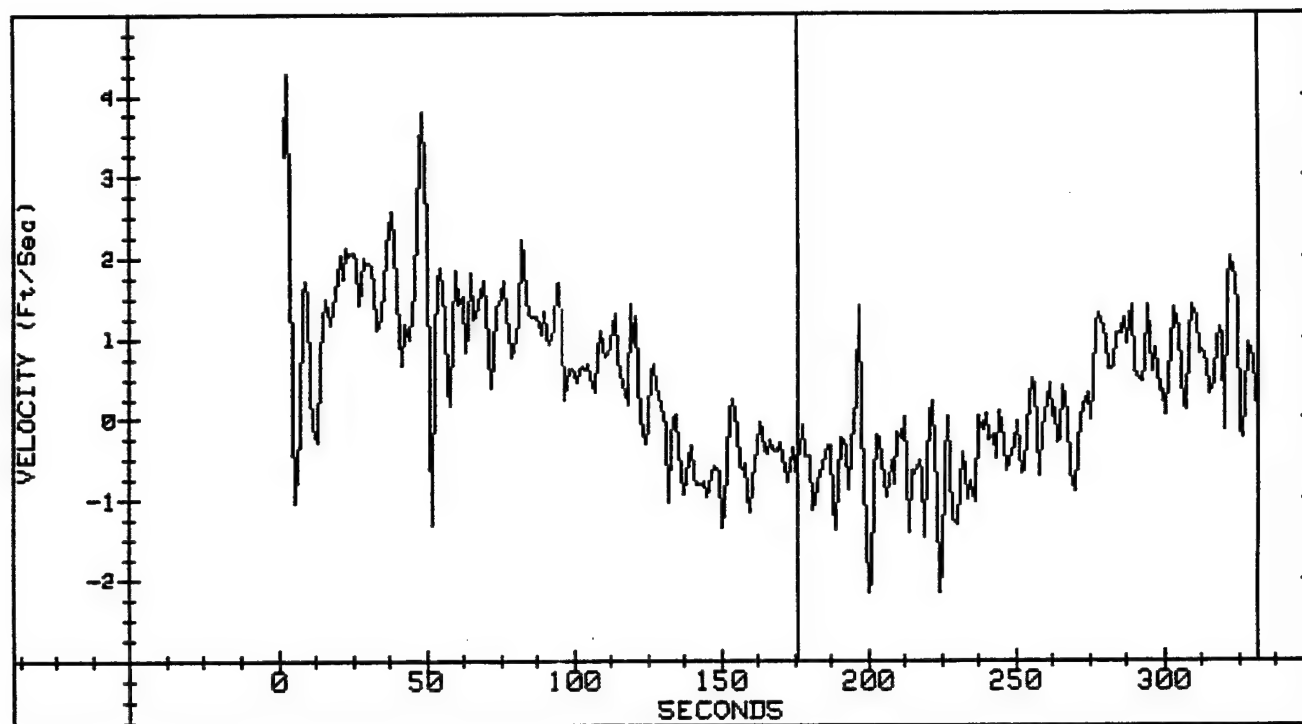
GPS Vn

DAY 170 TIME 2:42 PASS 28 m= -421.4, sd= 1.23775



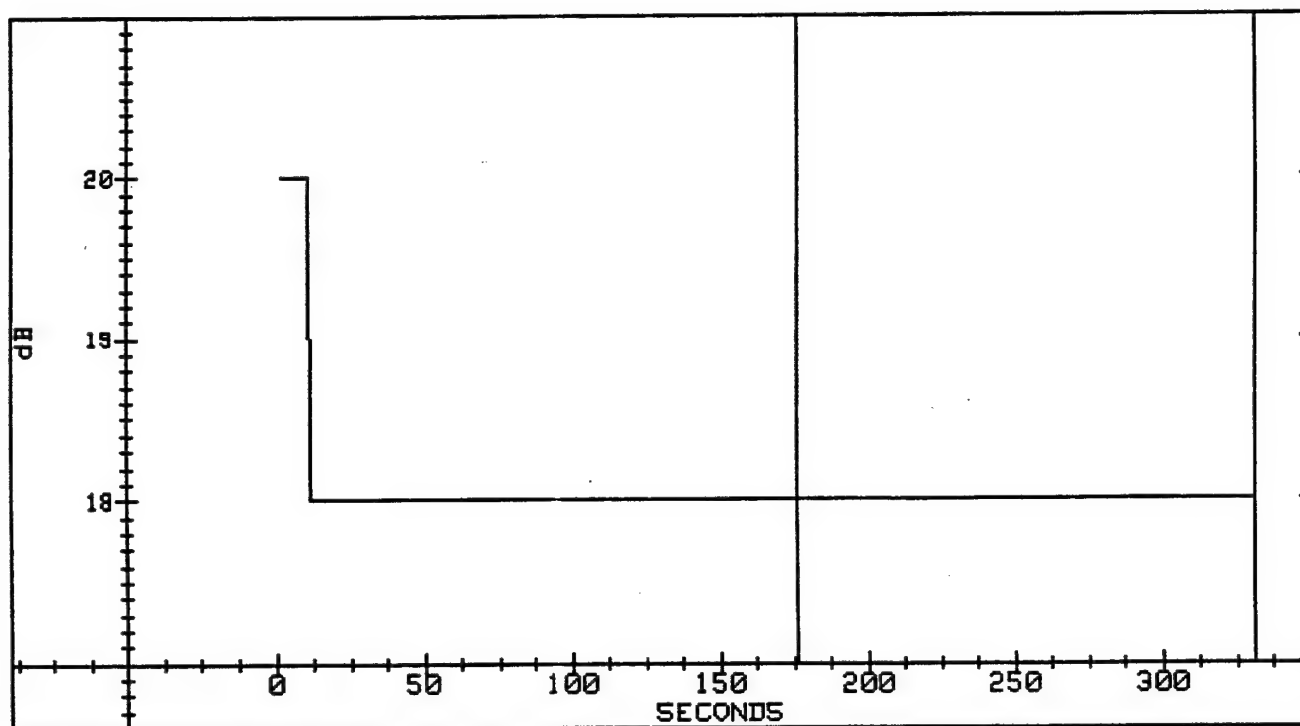
GPS Vv

DRY 178 TIME 2:42 PASS 20 m= .02648, sd= .032587



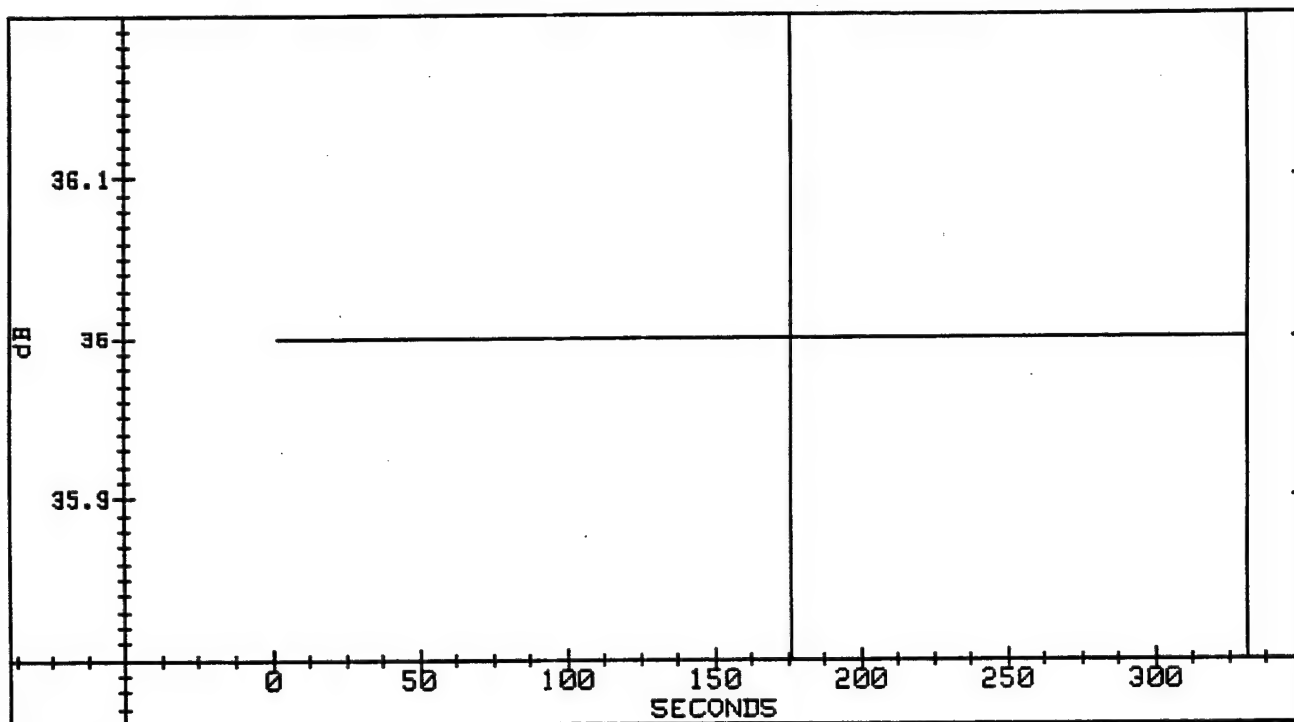
Ch1 RES Attenuation

DAY 170 TIME 2:42 PASS 20 m= 10, sd= 0



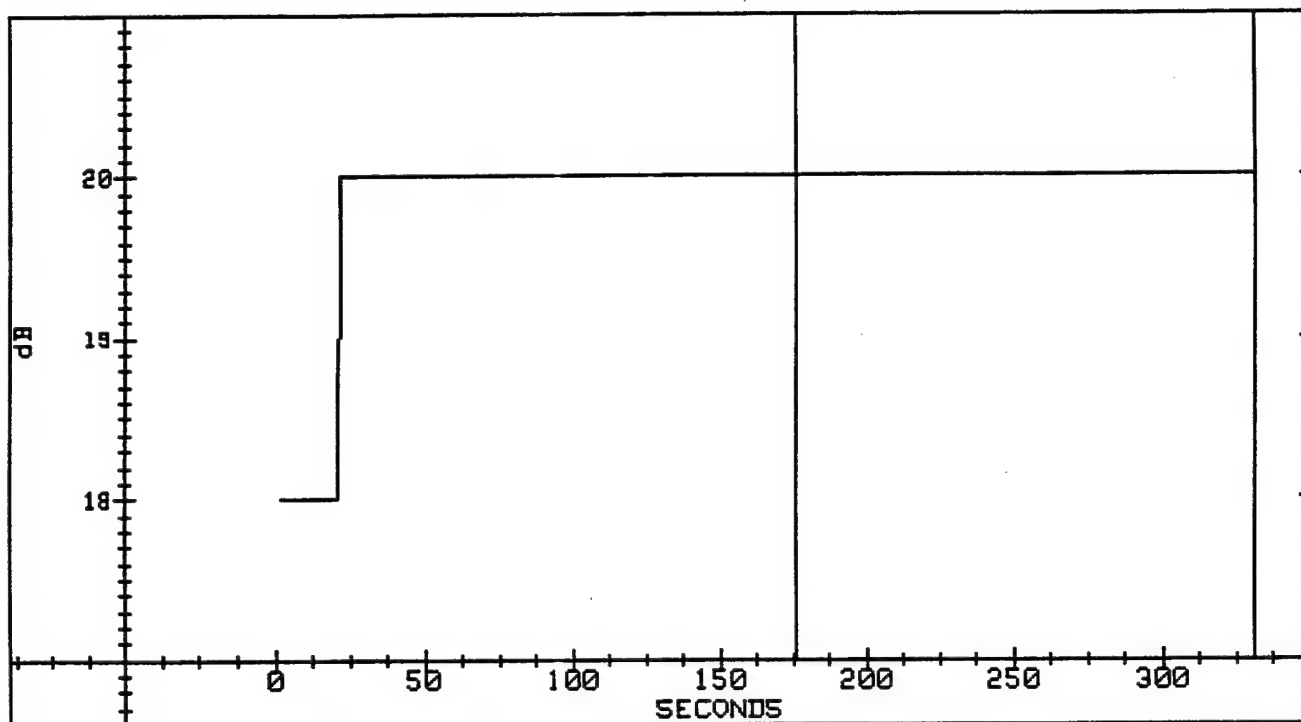
Ch2 RES Attenuation

DAY 178 TIME 2:42 PASS 28 m= 36, sd= 0



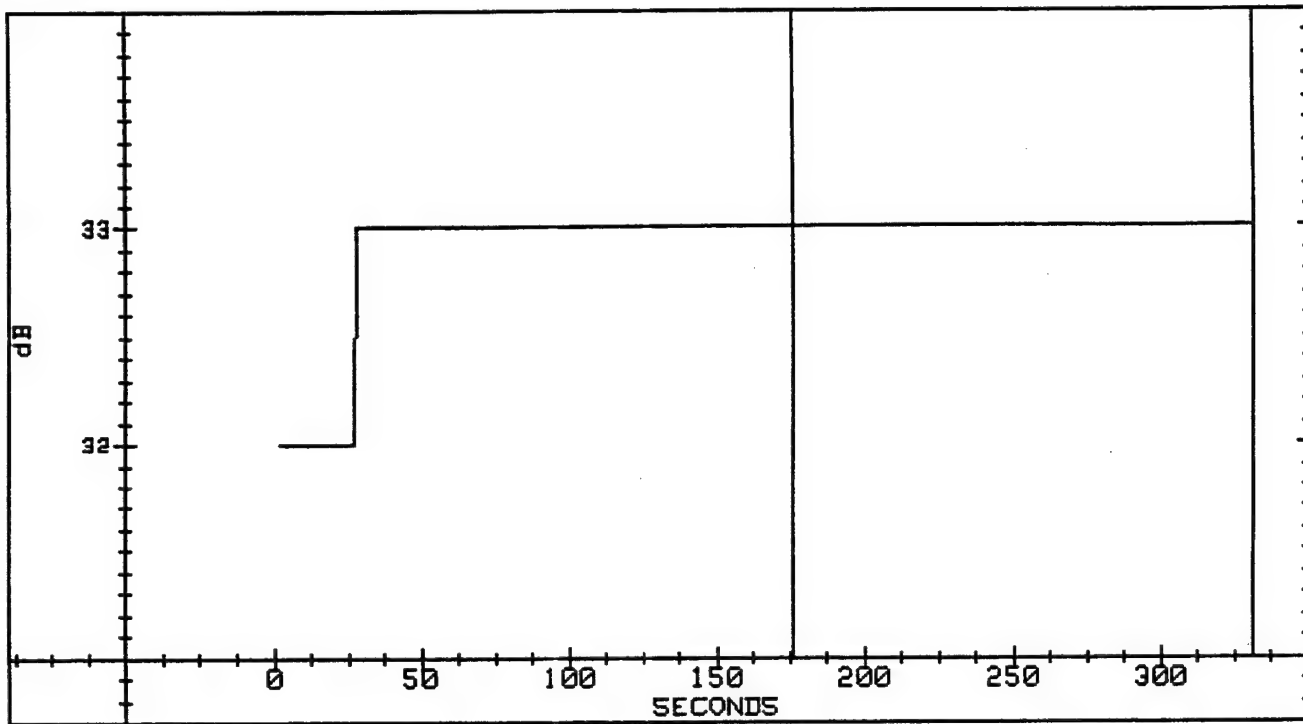
Ch3 RES Attenuation

DAY 170 TIME 2:42 PASS 20 m- 20, sd- 0



Ch4 RES Attenuation

DAY 170 TIME 2:42 PASS 20 m= 33, sd= 0

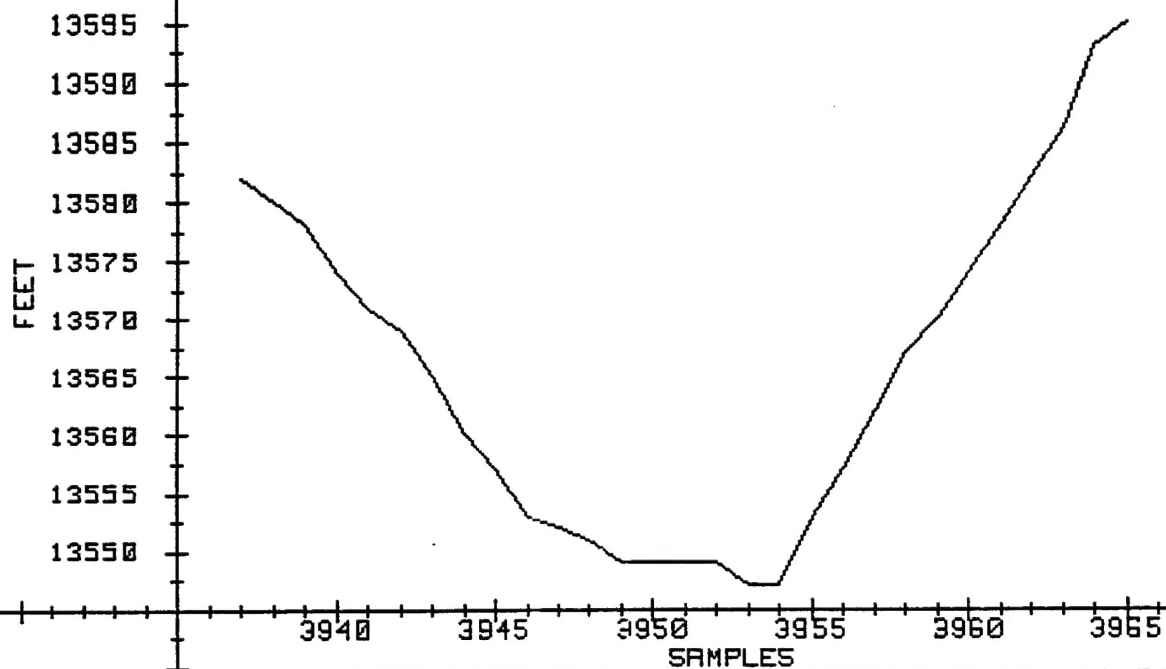


GPS ALTITUDE

MEAN= 13565.5 STANDARD DEVIATION= 14.371

DATE: June 26, 1995 PASS 20

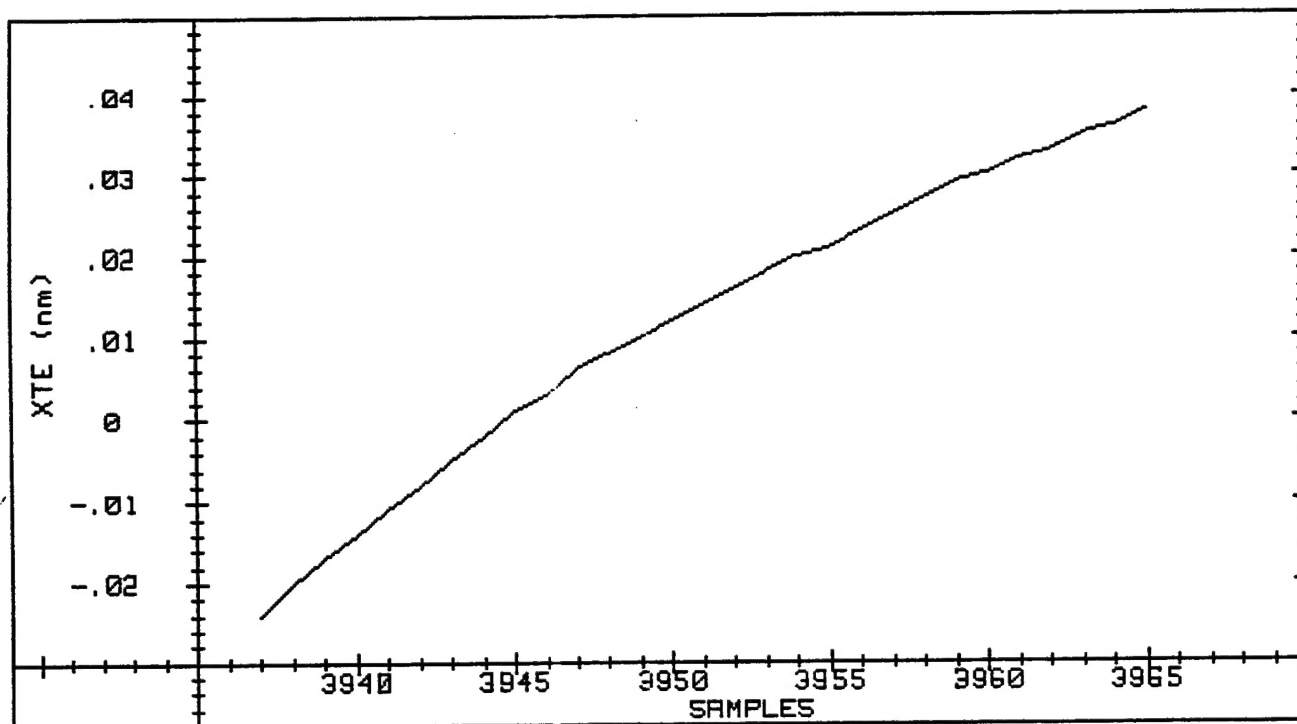
OFF
ON
BAR



GPS Cross Track Error

MEAN= .0115862 STANDARD DEVIATION= .0180565

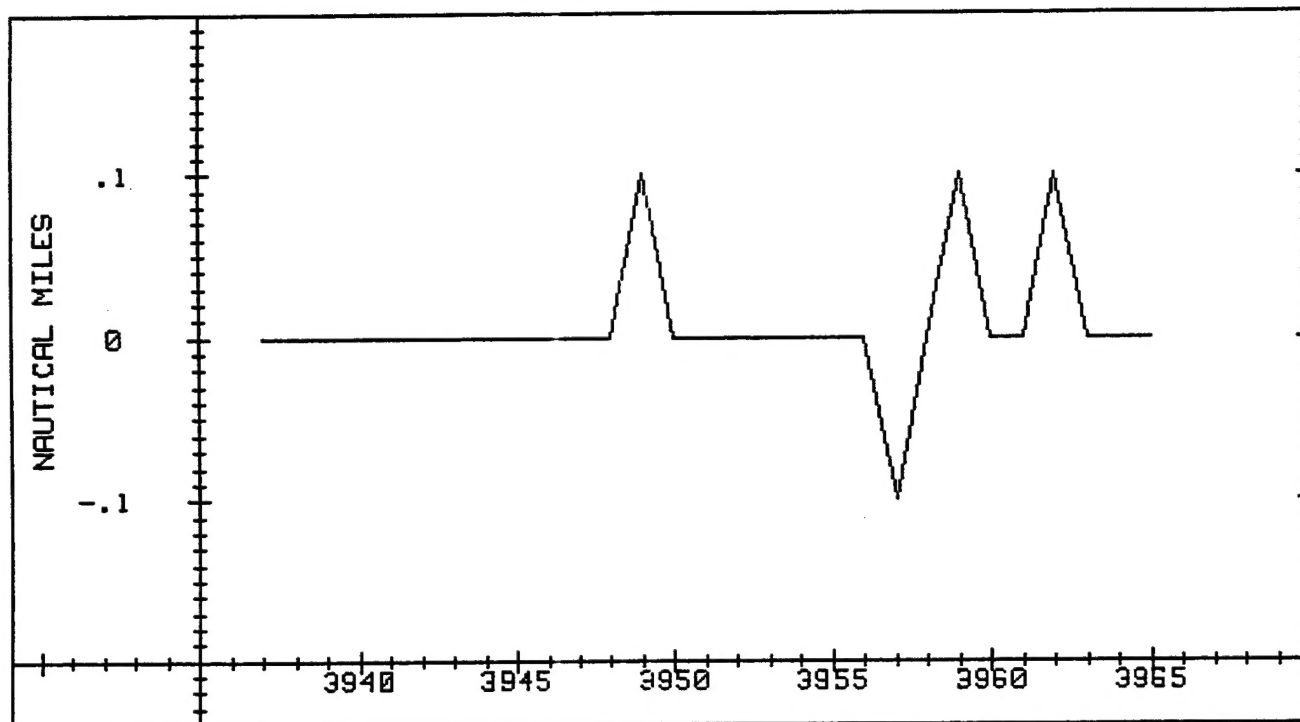
DATE: June 26, 1995 PASS 28



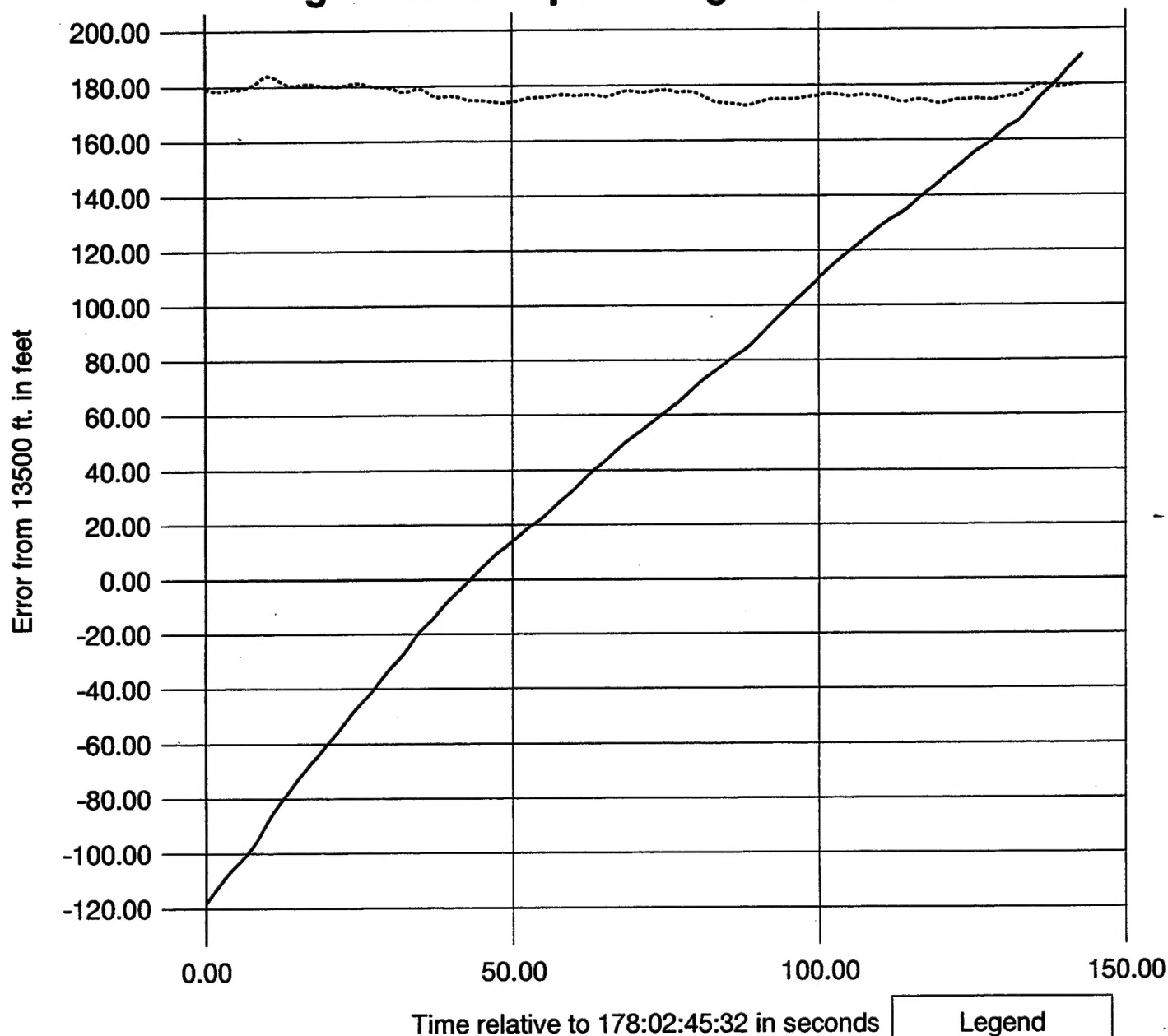
INS CROSS TRACK ERROR

MEAN= .00689655 STANDARD DEVIATION= .0364931

DATE: June 26, 1995 PASS 28



Portage, ME - June 26, 1995 - Pass 28 - Xtk. and Alt. Errors **Higher alt. and port are greater than zero**



	Mean	St. Dev.
ALT.	177.00	2.44
XTK.	49.39	85.64

Legend	
—	P5-xt
.....	P5-alt